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AMERICAN

CINEMATOGRAPHER

The Motion Picture CAMERA Magazine



Tony Gavison
Winner of
Academy's
Photographic
Award

April, 1937

Published in Hollywood,
by
American Society
of Cinematographers



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AN ANNOUNCEMENT ON EYEMO

KEEPING pace with cinematographers' changing requirements, the Bell & Howell line of Eyemo 35 mm. cameras now incorporates, as standard design, five important improvements:

1. Every Eyemo camera is now regularly equipped with a hand crank. These cameras can, therefore, expose a full hundred feet of film without stopping to wind the spring motor.
2. Every Eyemo now includes sound speed—24 frames per second—is in range of operating speeds. This includes even the lowest priced models.
3. Every Eyemo adapted for motor drive is now so accurately machined that motors can be purchased later and installed by the owner—or motors may be interchanged with other Eyemos.
4. All save the lowest priced Eyemo are now normally equipped with the S.M.P.E. standard sound aperture plate, and with a matching drum-type variable viewfinder.

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5. Every Eyemo is now equipped with a vibrationless high speed governor in the mechanism compartment instead of in the camera head. This provides great accuracy of speed, faster pickup, and extreme ruggedness in operation. A new Eyemo catalog is being prepared. Write today for your copy.



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Check back over the best shots of the year, the best pictures that have come out of Hollywood

and from the newsworld cameras at the ends of the earth. Most of them were Cooke shots. For these truly modern lenses were not formulated before the days of Super X, Bipsach, and Technicolor. They were ground to meet modern fast pan and color requirements—and that's why they are turning in clear, crisp negatives wherever they are used.

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HITTIN' THE TRAIL

By George Blaisdell

F. H. A. Making Pictures

IN A letter from F. M. ("Jim") Loughborough, former newspaper man now with the Federal Housing Administration, we are told that bureau has been doing some splendid work in behalf not only of the picture theatre owners but also studio persons in general. Already there has been issued a series of nine short subjects, "Better Housing News Flashes." Certifying the quality of the entertainment value of these shorts are the 45,000 play-dates already registered. Produced by Pathe News, they have gone right up and down the line, from Radio City Music Hall to the tank towns.

"Theatre managers are very glad to get these pictures," writes J. M., "because audiences like them and the theatre people are anxious to cooperate with the Government in showing persons of moderate means how they may own their own homes under the Federal Housing Administration plan."

It's a Big Show

THE GATHERING of the motion picture clan at the Biltmore on the evening of March 4 was the big event in the life of the motion picture in California for the year. As a function of size, of importance, it tops a schedule wider than that of California. It seems hardly possible there is anything motopicturessque to be compared with it in the rest of the United States nor for that matter in the world.

Blame indeed would be the spectator who could have looked in on that glamorous scene at midnight on March 4 without being moved. No screen could attempt an adequate delineation of the life and power so potently visible to an observer standing by the entrance and catching his eyes first to the extreme light and then away to the far left and back and forth across the auditorium's width.

Certainly it was a show. Present were showmen, too. There were men and women who wrote the shows and the men and women who made them. There were veterans of twenty-five years, men like Zukor, for example, among the producers and men like Tony Gaudin, A.S.C., among the cameramen—men who denote being veterans still are doing the best work of their lives and of the industry.

As for Tony, more power to his judgement on lights and shadows, to the keenness of his eye for details of composition, and to his "infinite capacity for taking pains"—which latter, after all, is the best definition yet conceived for genius.

Present and on the rostrum were luminaries in the fields of music and mirth—we give you Stokowski and Jessel; of science and business—we give you De Forest and Leslie Mayer; and in the fields of the technical—like Hal Rosson, A.S.C., for instance, for his color photography—and professional drossness.

Before leaving this great occasion—and less than great promotionalists in the eyes and minds of those satiated with spectacular coronings and goings—let's drop an orb

in the lap of George Jessel. In this matter of ceremonies thing he has got a mass of stuff on the ball.

Champing Down Lid

ONE OF Los Angeles' amateur motion picture clubs has moved to bring about a reduction in its membership and another one already is discussing doing that same thing. It is to the man on the outside a strange situation. Here is a hobby—for surely it is to speak no ill of an endeavor so to refer to it—that if it be not new at least is not old, yet the Los Angeles Cine Club has undergone enactment a rule that will make 100 members the maximum. When that point is reached no more applications will be accepted until the total membership has receded below 75.

At the February meeting of the Cine Club the auditorium of the Bell and Howell Building in La Brea avenue was so crowded by members and their guests it was necessary to bring in more chairs. The organization at that time had attained a membership of seventy-seven, having added a dozen since the first of the year. Six more were reported at the March meeting.

The whole situation turns on the seating capacity of available auditoriums, adaptable for the projection of motion pictures. The Eastman Theatre, at 6701 Santa Monica, while a world gem in luxuriance and equipment, never was designed to seat to advantage more than a few dozen at the most.

And so it is the movie boys and girls—for they are all young in spirit and in outlook—have come to the point where in self-defense they may have to put up the bars. And, too, they probably will have to keep them up until such time as arrangements shall be made either through public or private enterprise to provide them with halls large enough to accommodate the throngs that seem to be surging their way.

Of course, the answer is when the would-be joiners become in-sistent movie clubs will be provided.

Sera Drama

IT WAS quite some time ago, as time around motion pictures is reckoned—it must have been 1920 or so there—when Louis Reeves Harrison, a writer on the old Moving Picture World, walked in on his associates having about the performance of a young girl in a picture he had just seen. The next time he came in—he rarely wrote his stuff in the office—he brought in a series glowing with praise for Francine Harrison.

In the intervening years this reporter often has seen that name, usually in association with plays and the stage, but never until this month did it happen he had an opportunity to see the work of the woman over whom as a girl Harrison had raved in an earlier day.

Miss Harrison portrays the title part in Paramount's "John Meade's Woman." As in the opening scenes we followed the brilliant characterization of the farm girl's dull existence we thought of Harrison and his praise. As the story developed as the blunt farm girl came to love

Continued on Page 171

FRANK LLOYD HAILS MEN OF CAMERA

FRANK LLOYD paid rare tribute to the men behind the camera when speaking for the Academy at its annual awards he made the presentation of the photographer trophy to Tony Gaudio, A.S.C.

"I was mighty glad a director was called upon to make the award to the cameramen for the best photography, as I felt that no one could appreciate the work of a cameraman like a director," began this youngish looking veteran who for twenty-three years has sat alongside the camera and guided the making of many of the biggest productions to come to the screen.

The director was addressing twelve hundred diners—diners who, being human beings, and also being in holiday mood, felt like talking themselves. Even more than that, they were talking.

There was sudden silence as the director began his brief presentation. There was deep interest and close attention as he continued.

"The cameraman and the director work together on the story from its inception to its end," Mr. Lloyd went on, "and if the two are in sympathy with one another the cameraman very often enhances the dramatic value of a scene by his sympathetic lighting."

"The cameraman is one of the unsung heroes of the industry, and it is too bad that only once a year we are able to acknowledge to the public at large the great importance of this particular contributor to the making of a motion picture."

"I consider this recognition of cinematographers one of the most important awards of the year."

Recalls Cameramen

In a chat in his office on the Paramount lot a week following the presentation of the awards Director Lloyd recalled thirteen cameramen who had worked with him. Every one is listed on the rolls of the American Society of Cinematographers.

The first to be named was William C. ("Bully") Foster, now deceased; Gilbert Warenton, J. D. ("Dev") Jennings, Norbert P. Brodine, Victor Milner, Arthur Edison, John F. Sells, Ernest Palmer, Ernest Halber, Hal Mohr, whose "When Love Is Young" his first directing effort, was

Pays Cinematographers Unusual Tribute When He Presents Academy's Award to Tony Gaudio

presented March 12 last in *Pantages* here in Hollywood, Tony Gaudio, Glenn MacWilliams and Leo Tover.

One of the more notable facts in connection with Frank Lloyd's work as a director is that across the twenty-three years he has made pictures but a single subject of his ever was produced outside of Hollywood. The exception was the great "Les Misérables," a Fox production which besides bringing orchids to the director added to the fame of William Fairbank as the part of Jean Valjean.

It was released in January, 1918, and ranked as one of the best of the year.

As a motion picture the subject shared honors with Pate's prior adaptation of the same story featuring Henri Krauss, a screen drama that at the time of its making outshined by and large all that had preceded it. It had an unusually long run in New York—and in an atmosphere decidedly unusual up to that time for pictures—Carnegie Hall.

It may be interesting to note that Krauss is now being seen in the latest French version of "Les Misérables," appearing twenty years after as the Bishop.

Indicating his rank among his fellows and his relative position as judged by the members of the Academy it may be pointed out that Frank Lloyd has won two Academy awards for directing, sharing honors in that respect only with Frank Capra.

These awards were given for "Deluge Lady," in 1928-9, in which year also was directed "Weary River" and "Destiny" and for "Cavalcade" in 1933-3.

Last Picture a Hit

Mr. Lloyd's last picture was "Maid of Salem," now well enough on its way to give abundant assurance the director's judgment and capacity for selection and preparation and execu-

tion are so keen as at any time in the preceding twenty-three years. In fact, his friends are certain his greatest work is yet to come.

Beating out the claim of genius for preparation ascribed to the director by these same friends were a couple of letters that came to the maker of "Maid of Salem" the day this reporter was in his office. One of these was from the secretary of the Essex Institute of Salem, the society which speaks with official authority in all matters historical in Northeastern Massachusetts—and has done so for generations.

The two letters are illuminative of the critical examination expended upon the work of a director by persons expert in the subject touched upon, persons of unusual knowledge in certain directions who keenly resent errors of omission or commission on the part of picturemakers. So, too, it seems sometimes they are quick to praise one who engages in research, who takes heed of the old adage of Davy Crockett.

"Yesterday I saw the first showing of 'Maid of Salem,' here in Salem," writes Howard Corning, secretary of the Institute, under date of March 6, "and I hasten to congratulate you on your success. As an interpretation of the particular incident and as a representation of the settlement at the time, it seems to me to be admirably done, not merely in the general aspect but in the details. I have heard nothing but praise, and wish to congratulate you again."

Children Sit Tense

One of the substantial citizens of Salem with whom Mr. Lloyd consulted prior to the making of the picture was Willis H. Ropes, who like Mr. Corning saw the subject on the screen March 8 and promptly wrote his comments on the day following. He expressed his keen appreciation of the picture as a whole.

Mr. Ropes saw the production in the afternoon. In the house were hundreds of "restless children," gathered for a Laurel and Hardy picture. "As soon as the 'Maid' began," says the writer, "they were still as mice. . . It was tense all through until the splendid climax."

"My wife was, my children are, descended from two men who were hanged and from the brother of Rebecca Nurse and Mary Kate, hence my deep interest."

It will gratify the friends of Mr. Lloyd to know the fact of his pictures having received unusual praise from the press in England, where it opened in London February 17. The major press in New York and the East generally had been of the same opinion. To the middle of March it had averaged 150 to 185 percent over the country.

Still Likes "Mae, X"

The director was asked to name some of his more popular pictures, as he might recall them. Speaking off hand, he mentioned "Sea Hawk," photographed by Norbert Brodine; "Divine Lady," John Seitz; "Son of the Gods," one of the first to be made with sound, Ernie Haller; "Cavalcade," Ernie Palmer; "Berkeley Square," John Seitz; "Mutiny on the Bounty," Arthur Edson; "Under Two Flags," Ernie Palmer; "Maid of Salem," Leo Tower.

Then the reporter asked the director a personal question—which among all of the subjects he had directed were the nearest to his own heart, his particular pets, as it might be, regardless of what others might have thought or do think.

The director was silent a moment. "Well, I believe," he said, with deliberation, "of those of recent date, and speaking of those made with sound, I like 'Cavalcade.' Of the silent pictures I am rather fond of 'Madame X.' I think I may say I am really fond of it—which by the way was photographed by 'Dev' Jennings."

"Now that you speak of 'Madame X,'" remarked this reporter, "that was made by Sam Goldwyn?"

"It was."

"You have recalled to me something that may interest you. Ralph Block, present scenario writer, was Goldwyn's advertising man when you made that picture. I was editor of the Moving Picture World. One day Block dropped in on me and asked me if I would take a look at a couple of pictures—right then. I told him yes.

Private Reviews

"We crossed Fifth Avenue to the Goldwyn offices and in the presence only of the operator I looked on 'Madame X' with Pauline Frederick and a young man whose name it is a shame to let slip after the performance he put on—could it have been Forrest Stanley?—and then I looked at 'The Penalty,' with Lon Chaney.

"When the two were finished Ralph asked me if I would write him a memo on my reactions to the pictures. To my inquiry as to how brief he wanted

them he said something about the longer the better. I recessed the avenue to the World office and sat me down to the old roll. I was so full of the pictures, particularly of the young lawyer and his plea in defense of Madame X, my memos became letters of upward of a thousand words in each instance as I now recall.

"I sent the result to Block. Long after I learned the two letters immediately were put on the wire for Hollywood, where the smart S. G. got a fresh viewpoint on two pictures that he believed good and wanted to know what someone else thought. If he happened to be hoping for a rave he got it—twice."

The director smiled. "Yes," he agreed, "that is interesting. Incidentally also it may be of interest now to know the picture was made in twenty-two days."

Young Frank and Bob

The sequel is in the Year Book. "Madame X" was released by Goldwyns October 3, 1930, and "The Penalty," November 21 following.

"Tell me, if you will," asked the reporter, "who now is directing who was doing that same little thing when

you began twenty-three years ago."

"Me—m," replied the director. "Now you are asking me something. Let me see, there are Bob Leonard, Jack Conway, Sid Franklin—surely not more than half a dozen. It was soon after that Frank Borzage shifted from acting to directing. Bob Leonard and I then were the youngsters. Now we are the veterans."

"Just one more question," persisted the reporter. "In these twenty-three years what has been your average of production—I mean how many a year?"

A broad grin came over the face of the director. "Well, you know the first year I made fifty-two—all single-reels," he explained. "After that there may have been around four or five a year until about 1929. Then they began to slow down to one and a half or two a year."

"Pictures became more and more exacting all the time, not in one department of picturemaking but in all.

"Don't forget the evolution of the motion picture, its steady progression, can better be traced through and between the cameraman and the director than through any other two departments making most on pictures."

Frank
Lloyd,
for
Over
Twenty
Years
Director
of
Bigger
and
Better
Ones



DODD DESCRIBES B-M'S NEW TYPE 24-INCH SUNSPOT

By L. E. Dodd, Ph. D.

Professor in Charge of Geometrical Optics, Department of Physics,

AS WE ALL KNOW, improvement in studio lighting has taken great strides in recent years. What is photographically important is that the improvement came in the technique of delivering more light, with better distribution to the field before the camera.

This writer can make no claim to practical experience as an operator of light projectors in the studios. He could not but notice, however, on a visit to one of the studios in 1935, that in the 24-inch Sunspots (or "jokes," as they have come to be called, not inappropriately) considerable inefficiency of performance in two respects, *quantity* and *distribution*, still remained.

Three 24s, I am informed, have been and still are, from the standpoint of the studios generally, the best all-purpose lamps yet developed. For at least ten years, nevertheless, there has been no substantial improvement in them.

Only at spot is the performance of the 24s really satisfactory both as to intensity and uniformity of distribution. But the spot position is used far less often than the flood and partial flood ranges. Over that range, rather indiscriminately, they have suffered from the limitations mentioned. They have failed to give a really satisfactory degree of uniformity in the distribution of the light.

More specifically, they have not yielded enough light in the center of the field, relative to that out 10, 20, or more degrees from the center. This will be evident from the comparative material given in this article.

In a talk with the writer, Mr. Bardwell of Bardwell & McAllister, Inc., stated his belief, based on long experience with studio lighting, that it was quite practicable to improve the

24s. As an outgrowth of this conference the writer was retained as a consultant on light projection problems, pointing especially toward an improvement of the 24.

At the outset of such an investigation one is confronted with a peculiarly complicated problem, characteristic of such an optical system in which wide demands are made. Numerous, and to a considerable extent conflicting, factors enter into the design and performance of a device for projecting variable illumination (with reference to amount of light and size of field) that is at the same time, at all working distances, desirably controlled as to distribution.

Firmly believing improvement could be made, research was begun. Analysis, calculations, and experimentation under the writer's general supervision gradually converged toward an improvement in design. After many months of activity in the firm's laboratory, participated in by its technicians and Mr. Bardwell, the latter was struck with the idea of combining the optical parts contained in the invention of a new design, the "Triple-5" 24-inch Sunspot.

In the latter part of 1936 demonstration units were in the field. A patent is now pending. The amount of improvement has exceeded that expected at the start of the special studies.

While the distribution has been markedly improved, a point discussed in more detail later, there has been an increase of approximately 75 per cent in total light projected. This holds over a wide range of focus, from flood to quarter-flood.

The improvement in central illumination of the field, over the older SKW 24-inch lamp, is evident in detail in Table 1.

TABLE 1
Improvement in Performance of the B-M "Triple-5" 24-inch Projector, Over the Older Type SKW-24

Lamp Setup (24-inch)	Parabola Back Mirror	Approximate Relative Improvement in Illumination on Axis (Center of Field)			
		Flood	$\frac{1}{2}$ Flood	$\frac{1}{4}$ Flood	Spot
Triple-5	Metallic	8 to 1	3 to 1	2.5 to 1	1.5 to 1
Triple-5	Silver on Glass	8 to 1	6 to 1	2 to 1	1.6 to 1



Fig. 1—New B-M "Triple-5" 24-inch Sunspot (photomicrograph)

In pairs of curves, A and B, of Figure 1, the ironing out of the notorious black spot in the center of the field is seen to be accomplished by the new T-5. It is important, from the practical standpoint of performance, to note that the intensity of the center of the field has been raised to meet the intensity of the outside edge.

There is a pronounced smoothness of the curves by the new design, especially when backed by the metallic mirror (Curve A). The comparative performance at quarter-flood and up to spot is essentially similar, except that in the older lamp with the metallic mirror the black spot in the center of the field becomes shallower.

In Figure 2 the comparative performance of the old 24-inch lamp with the new T-5 is vividly shown by a comparison of photographs of the field in each case. These photographs simply confirm the results of detailed measurements of the illumination as shown in the curves of Figure 1.

A photograph of the new T-5 assembly as shown in Figure 3. One principle contributing to superior performance is the coupling of the specially designed lens and the SKW globe, so that their motion with re-

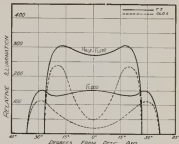
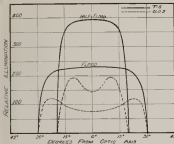


Fig. 1. A—Left, graphical representation of performance of the "Triple-V" equipped with metal mirror as compared with the older 24-inch 5KW with glass mirror.

Fig. 1. B—Graphical representation of performance of the "Triple-V" equipped with glass mirror, as compared with the older 24-inch 5KW with metal mirror.

spect to the parabolic mirror is a differential one of suitable ratio. Both the lens and the parabolic mirror come to focus at the same time.

Globe Shadow Out

The globe shadow, which in the older 24s contributed to the central dark spot, is eliminated through use of the booster mirror and the lens. Such an arrangement of course does away with the spill ring. The lens automatically takes care of the spill light, throwing it into the center of the field where it is photographically useful.

This is a unique feature of the T-5. The differential motion, together with the particular arrangement of mirrors and the new design B-M lens, gives control of distribution so as to make for uniformity that is practically independent of the degree of spread over the useful working range.

In the old 24-inch setup, as the

studio technicians will tell you, the metal parabolic mirror does not "carry" so far as the glass parabolic. In the new T-5 setup the carrying distances are equal.

Technicians agree that the efficiency of the T-5 surpasses that of any other type of studio lamp using the 5KW globe. This new lamp not only assists the cameraman in keeping a perfect balance of light throughout the set, but it also allows greater economy of operation by giving more light output for the same wattage.

VISUAL EDUCATIONISTS MEET

The seventh session of the National Conference on Visual Education and Film Exhibition (DeVry Foundation) will be held at the Francis W. Parker School, 330 Webster avenue, Chicago, June 21, 22, 23 and 24. It will be one of the most representative gatherings of visual educationists in

the United States, bringing together school and advertising fraternities and speakers and film exhibitors of national reputation. There will be no admission or membership fees.

NATIONAL CINE EXPANDS

For the second time in two years National Cine Laboratories, 29-22 West Twenty-Second street, New York, has been forced to increase its personnel, install additional machinery and equipment and double the space of its laboratory in order to accommodate the business on hand.

Besides manufacturing 35mm and 16mm silent and sound cameras to order, National specializes in repair and maintenance work of all types. Now a new department has been organized to purchase, rent and sell new and used professional cameras and accessories.



Fig. 1. A—Left, photograph of field of older 24-inch 5KW equipped with parabolic glass mirror; Fig. 1. B—Center, photograph of field of "Triple-V" equipped with glass parabolic mirror; Fig. 1. C—Right, photograph of field of "Triple-V" equipped with metal mirror.

A.S.C. OPENS NEW HOME

FEBRUARY 28 was a red letter day for the American Society of Cinematographers, for the society and for its members. That was the day the latter responded to a suggestion they attend a homecoming designed to be a housewarming at the same time.

It was during the final weeks of the year that has just passed the A. S. C. departed from the business quarters that for many years it owned and occupied on the twelfth floor of a Hollywood business structure. It departed from the atmosphere of the marts of commerce. It moved into a home, spacious and spreading and entirely on the ground floor with one minor exception.

Although but 300 yards above that point on Hollywood boulevard where the Hollywood Roosevelt and the Chinese Theater look diagonally across the street at each other, the society has in but a few steps lifted itself out of the realm of the turbulent urban into the quiet of the peaceful, residential suburban. Here surrounded by towering pine and fir and stately palm and in the center of gardens and lawns of over 34,000 feet in area the cinematographers may relax in a world far removed from the hurlyburly of a stage set.

Informality Reigned

But we started to tell you about the party. From 5 o'clock on that Sunday afternoon in the mansion at 1702 North Orange Drive informality reigned. There were no speeches—that is, not the kind the average man mulls over for a week and of which in his memory he stands on his feet at the mere recollection not a trace remains.

But there was much speech in the form of conversation, of greetings to old friends and associates, of renewal of friendships and of regloding the bond that for nearly twenty years has held under one banner these masters of the camera. The only stipulation the board had made was as to the starting hour. The closing hour was represented by three dots. And of course there were to be cocktails and a buffet supper.

Nor was there any disappointment even in a minor degree in any phase of the festivities—or in the beautiful home of which the members now were 100 percent owners.

President John Arkoll and Mrs. Arkoll were among the first arrivals,

Wives Aid Members in Informal Dedication of New Urban Quarters in Suburban Atmosphere

Throughout the evening the president and his officers, Vice Presidents Victor Milner, Charles Lang and James Van Treas, Treasurer Fred W. Jackson and Secretary Frank B. Good, were showered with congratulations of the members and their wives on the completeness of the new home.

Birthday and Anniversary

Aside from the presence of a Balalaika orchestra, all of the members of which brought their singing voices, there was no planned entertainment. Yet was the gaiety in no manner dulled on that account. The fun started early.

It was known that Edward G. Blackburn was packing a near birthday—near because being a "leap year ladie" the Bristolport western chief has no alternative but to accept the 35th in lieu of the absence of the 29th of the month. And the lunch kept an eye peeled for the appearance of Mr and Mrs. Blackburn.

As the two made their entrance the members and their wives, with the orchestra in the center, crowded around. There was an impromptu serenade—impromptu, but loaded with good fellowship.

Then there were mysterious gongs on in the boardroom, in the southeast corner of the structure. Behind a closed door court was held, the members of the jury filling the dozen easy-to-sit-in chairs that line three sides of the room.

Fun Never Lags

One at a time members were called, haled to the door of the courtroom, and upon proper signal being given the candidate was admitted to the Presence. Here before winning dismissal it was necessary to entertain the jury. Much curiosity prevailed during the trials, that is, on the part of those who had as yet escaped examination, but all was revealed in time. The chief bailiff was Treasurer Jackson, and as a rounder-upper he was relentlessly persuasive.

Then in an unguarded moment George Schneiderman let slip the word that he and the Mrs. were that day celebrating the twentieth anni-

versary of their marriage. A word was sufficient. And that word went around. In a few moments the couple was surrounded in the lounge, with the orchestra in the center of the circle.

To the applause of the party the musicians first played *The Wedding March* and then, with real effect, "I Love You Truly." It was a pretty and an effective feature of the evening's impromptu entertainment. The men enjoyed it, of course, but this particular quarter hour was considerably and peculiarly a part of the realm of woman. And much did the women make of it.

It was after 1 o'clock when the last of the hundred couples who had attended the housewarming of No. 1702 had said their good-nights. So successful had been the entire occasion—in the renewal of friendships, in the reunion of family groups that for years had been on terms of intimacy, and in the tender session of pals of days recent and remote—that many expressions were heard urging a "renewal" of the housewarming, provided it be not too long deferred.

The New Home

The new home of the American Society of Cinematographers is in one of the finest residential sections of Hollywood—and one of the oldest. It is at the intersection of North Orange drive and Franklin avenue. Formerly it was the home of Conway Tearle, who upon it and the grounds on which it stands expended large sums to make of it one of the show places of the community.

From in front of the grounds North Orange drive slopes gently south a long block to Hollywood boulevard, with the Hollywood Roosevelt squarely facing. Large trees closely line the two sides of the street. To the north across Franklin avenue a densely wooded hillside sharply rises—a bit out of the north woods, as one enthusiastic newspaper man described the vista.

The plot is 150 on North Orange drive by 235 on Franklin. Ornamenting it are many trees, quite a number of them rising to real height. Among these latter are three of the pine family as well as several of the fir. Also there are striking examples of the giant palm. To the west of the home a large lawn extends across the whole

Continued on Page 154

JACKMAN RETURNS TO BUSINESS

THE FRED JACKMAN Process Corporation has opened its new home at 1800 South Magnolia Boulevard, Burbank. The concern plans to continue to do the things in the way of special camera effects in which for twenty-one or more years Fred Jackman pioneered and specialized. Testifying to his success in a field which he largely developed are sixteen patents among other substantial evidences.

Among these other substantial evidences, even though they may not be personally identifiable, are men who today are walking the streets alive and most completely whole by grace of the lifesaving devices and expedients conceived and invented by the head of this new process company.

Those whose memory extends back a couple of decades will recall the many hair-raising stunts that formed a prominent feature of the box office lure of Mack Sennett's Keystone Comedies and the chaos of the Keystone Cops.

There was danger aplenty in those stunts. Beginning in 1915 at the Sennett studio Fred Jackman devoted his energies and his unquestioned genius for exploration in this virgin field first to reducing the hazard to life and limb in the recording of breath-taking thrills for the screen by the most particular timing and management, by his preparedness in advance of the zero second.

Made Life Safer

Also he applied himself to the invention of apparatus that when translated to the screen not only would make a structure the size of a doghouse look like a castle, but, not exactly unimportant to the producer, would make one dollar look like fifty. Further and even yet more important, while doing these things is essential or at least desirable in a commercial way he would be shielding life and limb.

The head of the new Jackman company was with Mack Sennett seven years. During that period, the process executive recalled the other day with grim interest, the question of

Special Camera Effects Executive Comes Out of Retirement—Opens Plant to Serve Film Studios

salary practically never was mentioned. The employee would find an increased sum on his check and when he culled with the producer he would extend his thanks. "Oke," would respond the producer.

"Mack Sennett was regular," declared Jackman.

The process expert moved to Hal Roach's studio after he left Sennett's, where he remained five years. From there he went to Warner Brothers, remaining practically ten years. Then he realized from 1926 to 1936 he had not lost a day's pay in the more than twenty-one years. There was an urge to loaf, to let the work stuff go hang. He did just that. He quit. He sold all his personal equipment. Like

Henry Lauder in his song, he could eat breakfast in bed seven mornings in the week if he should feel so inclined.

But the loaf thing proved to be no go. Fred Jackman decided to go back to work—but to work for himself. The answer may be read from an inscription engraved on a gold plaque ornamenting an oaky deskset forming one of the treasured features of an office simply but handsomely furnished and finished. This is what it says:

To

FRED W. JACKMAN

Congratulations and best wishes May the new business bring the fulfillment of your fondest hopes

From

John Aizold

March, 1937

Equipment Is Last Word

The new home of the Jackman Corporation is a two-story structure 50 by 100 feet in area. It rides on a plot containing more than 30,000 square feet—and that's a lot of room in which to grow.

The building is the last word in equipment designed to accomplish what the company plans to do. To the layman the structure is a mass of devices for automatic ventilation, for heating and for cooling, for washing and drying the air and the control of humidity. The walls are weather-proof and practically fire-proof.

Just as an incident, the floors of the laboratory sections are covered with green baize—so that any dust which may have sneaked in when no one was watching may promptly be discovered and thrown out. All equipment is built into the structure. The water is filtered and softened. A sprinkler system extends through the structure. Automatic time clocks start things rolling in advance of the arrival, if essential, of the workers in the morning.

The plant windows are sealed. This is possible because of the heavy automatic intake of fresh air and its prompt washing and



Fred W. Jackman

Continued on Page 140

MITCHELL ANNOUNCES NEW SOUND RECORDER

FROM THE INCEPTION of motion picture sound it has seemed inevitable that sooner or later the three great firms—the cameras of which photograph the world's motion pictures—would produce a sound-on-film recorder. Such a device, engineered and built by the world's greatest specialists in precision film-moving mechanisms, logically could be expected to set new standards of mechanical perfection. Yet none of the camera world's conservative "big three" has until recently been willing to place its name upon a recorder.

This month, however, the Mitchell Camera Corporation reveals the development of a sound recorder to which the name Mitchell is affixed.

While this is the first Mitchell-made sound recorder officially acknowledged as a Mitchell product, the Mitchell organization is hardly a newcomer in the field of recorder manufacture. For several years the firm has undertaken the engineering and manufacture of recorder heads for one of the largest and most painstaking of the major sound firms. Mitchell-made recording heads have been proved in major studio service all over the world.

With the lapse of this contract the Mitchell engineers began the development of a recorder capable of going forth as a companion of the universal, used Mitchell camera.

Portable Studio Recorder

The new device is in complete accord with the latest trend in recording practice. It is actually a portable unit, but engineered to meet the most exacting demands of fixed studio service. It is thus ideally suited to use in the modern manner as a mobile studio recording unit, eliminating the varied inconveniences and expenses of fixed recording channels with their intricate transmission systems.

The Mitchell recorder produces a variable area sound track, and has a frequency range of from 50 to 9000 cycles a second. The galvanometer regularly supplied produces a single-envelope sound track, but one producing a double-envelope track, with the latest high fidelity and noise reduction features is also available. If a variable density recording is desired the recorder may easily be fitted with a light valve.

The outstanding features of the recorder are its high mechanical precision and extreme flexibility. The

film-moving drive is through two sprockets the motion of which is damped by a special dual mechanical filter which minimizes "flatter" and similar irregularities. The recording drum is mounted on ball bearings and directly connected to a large, free-running flywheel. The adjustable take-up clutch is integral with the recorder mechanism, and a quick-acting anti-buckle switch is fitted to stop the mechanism in the event of improper threading, torn or broken film, or faulty take-up.

A tachometer calibrated in feet of film per minute is fitted, and in conjunction with the motor control rheostat insures accurate control of recorder and camera speed. A footage indicator is also fitted.

Non-Royalty Amplifier

The motor systems provide unusual flexibility. The whole motor unit is quickly and easily interchangeable, making it possible to use the recorder otherwise unchanged, for any conservable power supply or requirement. For the most mobile use, 110-volt DC-AC interlock motors are used to drive both recorder and camera, taking power either from dry batteries or from a motor generator set.

For use either in the studio or as a mobile, truck-mounted unit, three phase synchronous motors may be

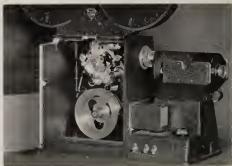
used. In this case, a variety of motors may be fitted, according to the type of current available. Either 110 volt or 220 volt, three phase AC synchronous motors may be used, with either 48, 50 or 60 cycle current. Whatever drive is selected, a matched camera motor is regularly supplied.

The electrical amplifying system is specially built for the system, and insures a guarantee of absolute freedom from patent difficulties. Although this amplifier is portable, it was designed to meet the needs of all studio recording service. It is possible to amplify the sound from a single microphone, or to mix the sound from three separate sources, such as microphones, sound projectors, or recording playbacks.

This amplifier is designed for use with a dynamic microphone and requires no external equalization. It has a gain of approximately 100 db, and an undistorted energy output of 1 watt. The circuits provide for feeding battery potential to such external equipment as microphone amplifiers, photoelectric cell amplifiers, extension mixers, etc. The speech lines are of low impedance, so that a considerable length of cable may be used between microphone and amplifier, or between amplifier and recorder.

When used as a strictly portable outfit, the equipment packs into six small cases. The recording head, magazines, 6-volt storage battery, microphone and cables each fit into a conventional fabric-covered case; the amplifier is built into a sturdy metal case, and the 250-volt "H" batteries are carried in a similar case.

The new recorder appears definitely worthy of taking its place beside the famous Mitchell camera.



New Mitchell Recorder

TONY GAUDIO WINS CAMERA HONORS

TONY GAUDIO, A.S.C., in winning the Academy's award for photographic excellence in 1936 with "Anthony Adverse" scores another bulwark to the credit of veterans of the camera. And Tony Gaudio may be the world's No. 1 photographic veteran of motion pictures, by that meaning one who since early in the century has been of and around motion pictures, in the beginning mainly on the laboratory side and since 1911 actively and steadily engaged at the camera, and still is being assigned to the largest productions.

The man just selected by the Academy comes from a photographic family. As a child he played and following his graduation from military school he worked in the studio of his oldest brother, Ralph, a photographer later to be president of the Society of Photography in Europe, and for photographic achievement to be nominated Knight of the Crown in Italy—a rare honor in the photographic realm in that country.

Starts at Nine

The child Tony, hardly, was nine years old when in his brother's studio in the little town of Cosenza in Italy he began playing with photographic papers, years before the coming of bromide.

Also he made his own enlargements—on sola paper, really albumen paper, later to be used as proof paper. This involved ingenuity on the part of the child. A mirror about 2 by 4 feet was so placed outside the building it could reflect sunlight into the camera.

The mirror was on gears so it might be curved with the sun. Had the mirror remained stationary the image would have multiplied as the sun moved. To avoid this disaster the child turned the mirror to keep the sun "on the spot."

Comes to America

The small Tony also prepared his own silver bath and his own collodion plate. Then it became necessary to take time out from the photographic side of his education to go to military school. It was 1899 when he bade

good-bye to the army and returned home.

There were several years with the famous Ambrosio Films in Torino—a brand popular in this country in the early days.

In 1905 young Gaudio came to the United States. His first employment in the new world was as head of the laboratory of Alfred Streppon, maker of song slides. Twelve hand-colored slides were made for each new popular or near popular song.

In 1909 the photographer moved to Flatbush—which is now as for many years it has been a part of Brooklyn—where he took full charge of the Vitagraph laboratory.

Then in 1911 came a call from Carl Laemmle again to cross the Brooklyn Bridge and head the new laboratory. The leading players in the Eleventh Avenue studio at that time were among others Mary Pickford, King Baggott, Joe Sealey, Owen Moore, William Robert (Bib) Drake and William (not Vitagraph) Shay.

A short time later Gaudio was shifted to the Imp's camera department and his brother Gene was assigned to the laboratory, Tony assuming charge of both departments. It was in the same year, 1911, Universal sent the cameraman to California with a company of which Frank Grandin was director. In the cast were Margaret Fucker, Harry Pollard and Jack Le Saint.

Joins Biograph

A studio was established on Brooklyn Heights, near the present Los Angeles County Hospital, where an open stage was built. In a few months Gaudio returned to New York, where he was engaged by the Biograph to photograph all the specials the company was making for Klaw and Erlanger, stage producers. The stage and screen men together were making plays for the screen, one of the earlier instances in which a stage play was converted to the screen. Here Gaudio remained until 1915.

In that year he went to California with a troupe of the early Metro company, one of the three organizations from which later grew Metro-Goldwyn-Mayer. Richard (Dick) Row-

land, pioneer supply and independent exchange man from Pennsylvania, and Joe Engel, formerly with Ed Porter in partnership with Adolph Zukor in the ownership of Famous Players, were at the head of the company. In the unit were Harold Lockwood and May Allison.

Following the death of Lockwood in a flu epidemic Gaudio joined Alan Dwan's company, and by that organization was loaned to Film Booking Office (F.B.O.), now Radio-Keith-Orpheum (R.K.O.), to photograph that company's first production, "Kismet," with Ottó Skermer.

The cameraman then joined the forces of Norma Talmadge, who under the management of Joseph Schenck was releasing through United Artists. He photographed all Norma Talmadge pictures except the final one made by that player before retirement.

Shoots "Hell's Angels"

Gaudio then was engaged by M-G-M to photograph Greta Garbo's first two subjects. Contrary to what might be thought these days, her initial pictures were of major importance. "The Torrent," with Ricardo Cortez, was the first, and "The Temptress," with Tony Moreno, the second. After these the cameraman moved to First National, where for a year he photographed Billy Dove.

Then began an engagement that from many angles was one of the most spectacular that ever fell to any cameraman in the history of motion pictures. That was under the banner of Howard Hughes. There the first subject was "The Racket," with Louis Wolheim and the second "Two Arabian Knights," with Wolheim and Bill Boyd.

And then came "Hell's Angels," a subject that from the photographic side made records only later to smash its own tops for new heights in figures for cameramen employed, for film exposed and for days and months worked. By and large the time consumed was two and a half years. The picture was completed, finally, as a silent. And then came the revolution of sound.

The producer decided to remake the picture in sound. Jean Harlow, not

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A. S. C. MEMBERS ON PARADE

● **John Stanner, A.S.C.**, has been busy at the Tudor Studios in England. He has just finished his third in a row, "Intimate Relations," with Jane Clyde and an all-star English cast. It was a musical farce and was directed by Clayton Hutton. John's first was an adaptation of that old classic, "The Mill on the Floss," directed by Tim Whelan. At the trade show the subject was well received, while the trade papers agreed the "photography and lighting were excellent."

Without time for a day off the A.S.C. man was pitched into "Stardust," a musical directed by Melville Brown, with Ben Lyon, Lope Velez and Wallace Ford, supported by an English cast. After one more John will be on his way to California, which he hopes to hit in May at the latest.

Everything in fine—that is, everything except the weather, and of that the man away from home expects to restore his natural average when he gets back. "My very best to the boys," is a recent word.

● **Karl Freund, A.S.C.**, early in March began supervision on the camera work on Garbo's "Madame Walewska," co-starring Charles Boyer, at M.G.M.

● **Gilbert Warrenton, A.S.C.**, sailed from San Francisco for Samoa March 4 in charge of the camera crew shooting backgrounds for Monogram's "Paradise Island." Dorothy Reed is in charge of the expedition.

● **Theodore Sparkuhl, A.S.C.**, under contract to Paramount, during the past month received his final naturalization papers. The decree, which also was conferred on Mrs. Sparkuhl, brings under the American banner the couple's five children. Sparkuhl is of German descent. Witnesses were Fred Leake, Stream Allen, Holly Moyes and Jeannette Basse.

● **Gordon Jennings, A.S.C.**, head of Paramount's special effects department, was seriously hurt March 4 while working with a camera crew at Lake Arrowhead. He slipped on a hill and was thrown down the icy side into a tree, injuring a vertebra. He was rushed to Hollywood, where in the Hollywood Hospital he was put

into a cast. He will be incapacitated for several months.

● **Glenn MacWilliams, A.S.C.**, has jumped back to England after a fast three weeks of twenty hours a day more or less. Following four years away from home there were many persons to see and consequently piling demands on his time. It was a matter of regret at A.S.C. headquarters but a brief visit was possible. Nevertheless on an early evening just before his departure there was a chance to rub elbows with the visitor. Leading interest to an all too brief half hour was Charles Rosher, not so long ago returned from the same "light little island." The two had much in common in the way of topics.

The visitor gave the impression of being extremely happy in his new home. To this scrum he seemed to have carried further the philosophy implied in the maxim of "When in Rome do as the Romans do." He gave the feeling that in his belief it was the duty of a transplanted national to seek to understand the viewpoint and the traditions of the men and women with whom he was called upon to work.

Unwittingly he gave a concrete exemplification of that philosophy when in the chat there crept to the surface his own reactions during the recent national emergency that centered around the change in the throne. He had shared the distress of the Britons.

There can be no question Hollywood sustains a substantial loss in the voluntary expatriation of this fast thinking and fast talking cinematographer—and of course that London accordingly stands to win. You may set it down that certainly he made a hit with one first acquaintance.

● **Ben Reynolds, A.S.C.**, who a year ago was so ill he was given sixty days to stay with it, is on his toes again. His long treatment at Dr. Sampson's in Santa Barbara and the subsequent rest and recuperation at his Malibu home have done the trick. One hundred pounds have slipped away from him, leaving him as he was in the days when he was under personal contract to Norma Sherrer and in other responsible spots—alert and go-getting.

● **Willard Van der Veer, A.S.C.**, after traveling 30,000 miles in the past

year, again is settled in his home in Beverly Hills. That journeying involved seven trips across the country, five by air and two by automobile, and four trips across the ocean. Also there were excursions to Canada.

During the year Van made two pictures in England, working at the new Pinewood studios. These are situated at Ivor Heath, on the outskirts of London, and are equipped with the most modern devices. In the matter of lights, cameras and film those of American origin predominate.

● **James Wong Howe, A.S.C.**, has returned home from England, where he went with William K. (Bill) Howard to photograph a picture. It happened when the director returned the cameraman was held in the English capital to make a second subject. Minnie Auer has signed a contract with Selznick International Studios.

● **Hal Mohr, A.S.C.**, in his first directing job, "When Love Is Young," was thrown a bouquet by both of the local film dailies following the preview March 12 at Pantages. Variety opened with the remark that "This will meet general audience approval as a program topper, with credit for its high average entertainment quality going to Hal Mohr for his first directorial job and to a dozen players for good performances."

"Playing and direction give impressiveness to a rather mild and time-worn tale. . . . Hal Mohr's first essay in direction and acting as associate producer is notably fine in getting fullest value from the material, scoring especially in the ingratiating comedy and deft blending of the musical and dramatic elements."

The Reporter captions its review "Hal Mohr scores with swell cast." "Sweet entertainment from start to a hilarious finish," the text opens. "When Love Is Young" is one of those little pictures that makes big names at the box office. . . . But the big news concerning this picture is that it marks a really auspicious directorial debut. Hal Mohr, long known as one of the industry's ace cameramen, here ties his hand at direction and turns out a superb job. There are no tricks that he uses in development of characterization, and touch after touch show master light craftsmanship. Make way for an important new director."

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EASTMAN *SUPER X*
PANCHROMATIC NEGATIVE

ART REEVES INTRODUCES ALL-PURPOSE DEVELOPER

THERE HAS for some time existed a definite need for a developing machine capable of truly wide-range application. The majority of machines for developing motion picture film have been almost without exception one-purpose machines; they might be fitted to process negative film, or positive film, or sound-track, but rarely could a single machine be used interchangeably for all three.

This situation is not particularly objectionable in Hollywood, where a major studio or commercial laboratory can expect a large volume of business. In such a plant it is economically as well as technically feasible to devote one or more machines exclusively to each class of service.

Away from Hollywood, this condition is reversed. The average laboratory cannot count on daily handling the output of from half-a-dozen to a score of production units. It is not, therefore, feasible to equip a plant with a large and expensive developing machine solely to process negative, and then virtually to duplicate the installation for developing positive.

To meet these needs, Art Reeves, well known as a designer and builder of efficient laboratory, sound and camera equipment, has introduced a new, wide-range developing machine.

Develops Negative and Positive

This new machine has been engineered to conform to the highest modern standards. It will develop either negative film or positive film interchangeably. Though it is a single-strand machine it requires no rethreading and no draining or refilling of tanks for this change. Similarly, it will handle either 35mm. or 16mm. film.



Solution tanks. Note how film in negative developing tank remains threaded while developing positive in inverse tank.



Film-drying cabinet, showing thermometer and rotating drum.

The choice of materials used in constructing the new machine follows the best modern practices. The tanks are of wooden construction. The framework is largely duralumin. All metalwork in contact with either film or solutions is stainless steel, and generous use is made of Bakelite, Celcon, and similar non-corrosive plastics wherever these are applicable. Solutions are pumped through special rubber tubing.

A special variable speed drive permits variation of the developing time from 1½ minutes to 18 minutes. One hundred and twenty feet of film is in the tanks, and the film is under only a very low tension. A special pneumatic squeegee virtually eliminates "carry-over" of solution from one tank to the next. The circulating system is designed to produce a turbulence-effect sufficient to avoid directional markings. Solution temperatures, and the temperature of the drying box, are automatically controlled.

Occupies Two Rooms

The machine is very compact. In a normal installation it occupies two small rooms. The feed end, including the tanks for developing, fixing and washing, are placed in a dark room. From this room the film extends through a tube passed through the wall, into the dry-box and take-up, which may be in a lighted room. The driving motor, air-compressors, etc., are in this unit.

The tankage comprises six sections: positive developing tank, negative developing tank, rinse tank, wash tank, and two smaller storage tanks respectively for positive and negative developer.

Over the outer end of these tanks is a light-tight film feed magazine, in which the undeveloped film is coiled on a standard 9498-foot reel. The two storage tanks are placed at the end of the tanks, under this feed box.

Next come the two developing tanks. That for positive development is nearer the feed box than that for negative. These two sections of the machine are always kept threaded. The leader in whichever tank is not being used is simply broken from the strand and allowed to hang loosely.

with the ends clipped to the upper tie-rods. For instance, when the positive tank is being used, the leader in the negative developing section remains threaded, but is broken from the strand and allowed to hang loose in the tank so that the film will not be moved by the bottom drive-roller. The two ends are clipped to the upper tie-rods with ordinary wooden spring clothespins. When the machine is to be used for negative the positive tank is similarly disconnected, while the negative-tank leader is joined to the strand with Mercer film clips.

Separate Circulating Systems

The systems used for circulating developer are in duplicate. The negative-developer circulating system is wholly independent of the unit that circulates positive-developer. Each has its separate storage tank, from which the solution is pumped to the developing tank by a specially built centrifugal pump, which is constructed entirely of Bakelite and Celcon. The external plumbing is of hard-rubber tubing and special rubber hose. The solution enters at the bottom of the tank and is directed against one of the sides from which it recedes with a swirling motion. As the tank rotates, with the intake at the bottom and overflow at the top, this swirling movement of the solution continues, and gives excellent turbulence. The two pumps are powered by separate motors so that only the solution actually in use need be circulated.

The developer temperature-control systems are likewise independent. A stainless steel enclosed electric heating element is placed in the bottom of each storage tank,

series-connected with a Mercoid thermostat switch. These thermostats will automatically maintain the solution within 3 degrees of any predetermined temperature. Separate indicating thermometers indicate the temperature of the solutions in the developing tanks.

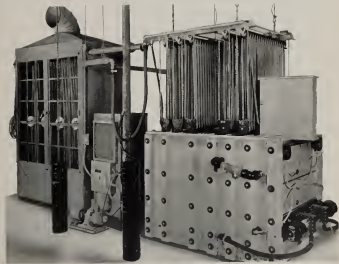
Pneumatic Squeegee

The film-moving mechanism is built in a rigid duralumin frame which may be hoisted clear of the tank in the conventional manner. That part of the framework immersed in the solution is constructed entirely of stainless steel and non-corrosive plastics. The rollers over which the film moves are of Bakelite. The upper ones revolve freely. The lower ones only are powered.

A main driving shaft extends lengthways of the tank unit. From this, gear-driven vertical shafts of stainless steel extend downward to the bottom of each film-moving loop and thence, through Bakelite bevel gears, drive a stainless steel shaft upon which fit the driving rollers. The film is under tension only when the take-up brings it into contact with these rollers. Otherwise, it may move freely, under the extremely slight pull of the take-up.

As the film leaves each tank it passes between Bakelite nozzles through which a downward-blasting current of air is directed against the faces of the film. This provides a squeegeeing action which maintains and virtually eliminates carry-over of solution from one tank to another. The designers state that there is therefore no dilution, and

Continued on Page 147



The new Air Blast all-around developing machine.

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A.S.C. Opens New Home

Continued from Page 113

front. Around the borders of the plot gardeners have created decorative examples of their craftsmanship. To the rear is a large space at present devoted to parking. Also there are locations already "spotted" for a swimming pool and a golf driving court.

Glah's Lounge a Feature

The home itself is of Spanish architecture, covering an area of about 65 by 70 feet. As before stated it is of one story, with a single exception. That exception is a cupola at the southwest corner, containing a single room with eleven windows and also a door giving entrance to the roof. There are awnings on the outside and Venetian blinds on the inside.

The room is featured in this description because it is the sanctum of the magazine you just now are reading. As an editorial room it is unique and priceless—is any man's country. Under the shade of these big trees it is as quiet as a mousehouse—and as remote, seemingly.

It is true there are other rooms, a dozen of them. The center of interest, the room that aroused the enthusiasm, especially of the women guests at the housewarming, is the high-ceilinged lounge, 30 by 30 feet in area. This portion of the home is a converted patio, wherein the tiled flooring and the fountain in the center were removed and a great skylight imposed for a roof.

The skylight strikingly enhances the effectiveness and attractiveness of the lounge. It is 14 by 17 feet in area and contains 32 upright or perpendicular windows of colored glass. The superstructure rises three feet and then, all in glass, peaks to a point seven feet above the roof level. Columns at the four corners of the lounge and two smaller ones marking the entrance to the room after crossing the hall from the front doors add to the striking appearance of the room upon entering.

Home's Conveniences

Coming into the building the office of the executive business manager is at the left, at the northwest corner. The working and information offices are at the right. Cline from here in reverse clockwise order are the stockroom, library, where are kept on file photographic magazines from the four corners of the world. Bound volumes of this magazine and reference and technical books are here for the use of members. Also there are writing facilities.

Next in order is the boardroom, arranged for the convenience and com-

feet of the fifteen members of the Board of Governors. There is a card-room, with provision for many players. The cocktail room is something of a feature itself, too. It is geared to provide for good-sized parties—and it does. It has a homey atmosphere.

Then on the northeast corner are the kitchen and the party and related rooms. The billiard room, completing the circle, demonstrated on the night of the housewarming that it has a double function—that of a miniature banquet room, and maybe not so small at that.

The furniture and fittings have been installed following great care in selection and with regard mainly to their quality and permanence.

Jackman Returns to Business

Continued from Page 137

conditioning and pumping throughout all the rooms of the building. There are four intakes. The air is filtered through spun glass, seemingly two or three inches thick.

Downstairs there is a projection room with a throw of sixty feet normally, but which may be extended if necessary to eighty feet. Eighteen motors have been installed to control the basic operation of the various machines throughout the building—as for example the sprinklers, air conditioners, water filters and softeners, etc. The air is taken from the roof, and after passing through a series of filters is recirculated in a volume of 25 percent fresh air all the time.

On the second floor on the Magnolia Boulevard side are the business offices, the air, water, temperature and other factors connected with which are on the same basis as are those of the laboratory. Adjoining are the eating room and the loading room, as well as the printing rooms.

In the developing room all of the equipment is operated by individual

Continued on Page 147

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DOUGLAS SHEARER AND M. G. M. HONORED BY ACADEMY BOARD

DR LEE DEFORREST, eminent scientist and inventor, in bestowing the Academy awards for scientific or technical achievement, announced that the board of judges had this year, for the first time since 1933, granted an award in Class I, which is an Academy statuette and plaque, to Douglas Shearer, A.B.C. and the Metro-Goldwyn-Mayer sound department.

Although a number of certificates and honorable mention awards have been given each year for scientific or technical achievement, the board of judges has felt that a statuette award in this field should be reserved for only the most outstanding technical developments, and consequently withheld this class award until this year.

In granting the statuette award to Shearer and the Metro-Goldwyn-Mayer sound department for the development of a practical push-pull system and a biased Class A push-

pull recording system, the board of judges stated that "in inaugurating its study resulting in the development of the two-way horn system, involving improvements in old elements and their synthesis with new devices, the Metro-Goldwyn-Mayer Studio had in the opinion of the board of judges contributed a large factor to the advancement of sound as heard in the theatre.

Award to Shearer

"The design of this horn system gives improved efficiency, greater acoustic realism, and better distributed sound throughout the theatre auditorium at a cost within reasonable commercial limits.

"Coincident with this achievement there was developed a biased Class A push-pull recording and reproducing method which results in the attain-

tion of an increased, undistorted volume range with no increase in surface noise. While either achievement can stand alone, they are combined in this award because from an engineering standpoint a unified treatment of recording and reproducing problems is an essential principle."

In addition to this, the board granted two awards in Class II (Academy plaque), one to E. C. Wente and the Bell Telephone Laboratories for their multi-crillar high frequency horn and receiver, and the other to the RCA Manufacturing Company for its rotary stabilizer sound head. It also granted four awards in Class II (honorable mention in the report of the board of judges) as follows:

To the RCA Manufacturing Company for its development of a method of recording and printing sound records utilizing a restricted spectrum (known as ultra-violet light recording).

To Electrical Research Products, Inc., for the KRPI "Type Q" portable recording channel.

To the RCA Manufacturing Company for furnishing a practical design and specifications for a non-slip printer.

To United Artists Studios Corporation for the development of a practical, efficient, and quiet wind machine.

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DOUGLAS SHEARER, A.S.C., director of recording at the Metro-Goldwyn-Mayer Studios, who developed the new double track sound recording and reproduction that has revolutionized presentation of talking pictures and made it feasible, at work in his laboratory.

(Continued from Page 14.)

ingness. In fact, that principle prevails through the plant. The rear half of the second floor is devoted to the miniature shop, 55 by 50 feet; draughting room and machine shop.

The plant represents the last word in process equipment. No effort or expense has been spared to insure that result.

Fred W. Jackman is an ex-president as well as one of the pioneer members of the American Society of Cinematographers. More than that, he has been one of its illustrious members and untiring supporters throughout its life. At the present time it is its treasurer. To him and the fifteen employees who start with him as his new enterprise go the hearty good wishes of the A.S.C. personnel.

Art Reeves Introduces New Developer

(Continued from Page 14.)

that solutions have an increased active life.

Separate air-circulating system—takes care of this squeezing and of the film-drying. The former, naturally, supplies air under pressure. This system consists of an electric motor-driven compressor which is placed in the second machine-room, by the dry-box, etc. Both the intake and the output of this compressor are fitted with special silencers which minimize the noise of operation. An efficient air-cleaner is applied to the intake of the compressor, and a safety-valve to the output line. The compressor is capable of supplying air to two of these machines if necessary.

The air for drying the film is warmed by an electric heater and driven by a fan which forces 1000 cubic feet of air a minute into the dry box. The heater unit has two degrees of heat—high, at 10 KW, and low, at 5 KW. The air for this purpose is drawn normally from the room in which the dry box is situated, sucked through two large intake ports and filtered through interchangeable filters of spun glass impregnated with 11-oxo-sil. From this furnace, the drying air enters the bottom of the dry box, and is directed upward by adjustable deflecting vanes. A thermostat operates a warning bell in the event of any failure of either fan or heating units.

Continued to Page 152



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Tony Gaudio Wins Camera Honors

Continued from Page 139

in the first picture, was given the lead in the sound version.

Tony Gaudio is a strong believer in the value of the Academy's photographic trophy. He believes it is an incentive to cameramen to do their best, to give their best.

Shot 999 Pictures

"Probably small and large I have photographed 999 pictures. You may say that's a lot of pictures whether I shot them or not. But they were not all 'Hell's Angels.' Many of them

were single reels—and even less. But that lot of statistics means that I have faced many times more than 900 problems—and for every problem surmounted there's another ache filled in the back of the head against the recurrence of the same incident. There's no royal road to learning in photography any more than there is in anything else—and the new blood has got to travel the rough road just the same as its predecessors, the old blood, did."

The cameraman passed a moment and looked down the hillside from his house and across the widespread San Fernando valley to the mountains beyond. His face still serious he turned to his visitor.

"I've got a couple of matters on my chest," he went on. "One of these concerns this same new blood. The photographer who really loves his profession will do his utmost, as I see it, to convey the rudiments and the fundamentals of it to his younger associates. He will continue to teach them until he has given them what he has.

"I believe I have been instrumental in helping a number of cameramen, to aid them in reaching tops by elucidating what I was aiming to do and telling why I was doing it rather than keeping my associates in ignorance of my movements.

Vindication

"Tony, you said there were two things on your chest," suggested the reporter. "There's one left."

"There is," was the response. "I want to say to you and to the trade I am convinced there never has been one of my brother cameramen who was so happy over winning this award as I have been. For see it has been a deep as it will be an abiding satisfaction. Its coming to me has meant the refutation of an untruth the circulation of which proved serious to me beyond words, the vindication at the same time of what to a photographer must be his chief business asset—the soundness and the keenness of the eyes with which he works.

"Six years ago for nine months I did not work a day, not in any capacity. Then Warner Brothers in 1933 put me on 'Tiger Shark.' The rest is history. I haven't lost a day in six years.

"I feel this award has capped beyond any chance of evil the completeness of my rehabilitation. And my gratitude, deeper than words can express, goes to the men and women of this great industry."

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Priced for the more modest purse are two companion Double Eights, both equipped with F 3.5 color-corrected anastigmat. The normal speed model is priced at \$49.50, the super speed model at \$54.50.

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THE AMERICAN CINEMATOGRAPHER 1937
Amateur Competition is open to amateurs all over
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The films must be in the office of the American
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There are no restrictions as to the number of sub-
jects that may be entered, nor are there any restric-
tions as to the length of the subjects. The one strict
rule that applies, however, is that no professional help
be received in the making of the picture. This does
not include titles which may be made at a laboratory.

The American Society of Cinematographers will make
due recognition of the respective merit of the compet-
ing subjects, the particular form of the awards to be
announced later. The board of judges that will pass on
the competing films will be composed of members of
the society.

The subject will be given classifications so that the
competition may be fair to all entrants. By this we
mean that an entrant having a documentary film will
not compete with one based on a scenario. Of course,
there will be more classifications than these, which
will be created according to the pictures that are re-
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Please remember your films must be in the office
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AMATEUR MOVIE SECTION



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WHEN Harry C. Pearson, business man who had retired early in life in order to see a lot of the world, and Mrs. Pearson left the United States in 1935 for Africa they were entering upon what to them was little more than just another one of those trips.

To be sure it would be looked upon from quite another viewpoint by the everyday home-staying man in the street—this journey, with an itinerary of eleven thousand miles, into the heart of Africa, into the country of big game and big men—and incidentally also into the country of little men.

For speaking of men there would be the pygmies, of an average height of four feet, and the Latukas, who would prove to be humans of marvelous physique and of an average height of seven feet.

Of course the Pearsons could not know they were to be successful in approaching and looking upon scenes and men and animals for other men had been permitted to see. They could not know they were to be successful in photographing these same scenes and men and animals.

Shift To 35mm

Now the cat is out of the bag. For the Pearsons for nearly two years before their departure had been dabbling with amateur cinematography. On this trip, however, they were for the first time to try their hand at the 35mm thing. In their somewhat extensive assortment of impediments were two Bell and Howell Eyemo—one of the free hand brand and the other equipped with batteries and tripod.

AMATEUR CAMERAMEN MAKE WINNER

As to the eventual disposition of the 35mm film they planned to expose there was no thought beyond putting it aside to be exhibited when the spirit moved, to serve to memory some of their experiences in the jungle and on the plains if any they had and to reveal only to those friends close enough to have a personal interest in their comings and goings.

When the Pearsons returned to the United States and in the course of time and at their leisure they had selected some of the twenty thousand feet of exposed film for showing to their friends they learned several things. The chief of these was that their own belief they "had something" might be right. These friends insisted the detached bits they had seen constituted genuine theatrical entertainment of a high and an unusual order.

The Pearsons were in a predicament. Their knowledge of picture-making was restricted to the camera side. Of production and distribution they knew naught. Nevertheless this

knowledge they accumulated with some speed.

Hal Hall Edits

After several false starts Hal Hall, who by older subscribers will be remembered as one of the editors of this magazine, was engaged to supervise the preparation of a feature picture. With Ed Taylor as cutter Hall attacked the great variety of material, assembled it and from the facts furnished by Pearson wrote the comment that would accompany the production.

Late in March the editor of this magazine was a witness of what the Pearsons had accomplished in Africa. The screened result will bring a thrill of pride to amateur cinematographers throughout the world. More than that, in "African Holdins," in its general photography and in its craftsmanlike preparation and presentation, there will be much to bring commendation from the professional man of the camera. None know better than these the handicaps that pursue the photographer in equatorial Africa.

To the regular followers of the screen as well as to the millions of just casual customers and even the non-cinematographers the picture will possess rare interest. It will stand on its own merit in any dual program into which an exhibitor may choose to shove it—with an excellent opportunity, in showman's parlance, of "hogging the show."

"African Holdins" opens in the home of the Pearsons, where the two discuss their coming adventure with a former British official, one who knows his Africa. The latter gives wholesome advice and also suggests efforts be made to secure pictures of the snake dance, where natives handle and are without harm bitten by deadly poisonous reptiles.

The introduction is very brief and the party is headed in Africa without delay. In fact, the trip from London to Nairobi is made in a twenty-four-passenger plane. There is an initial



First photograph ever made of sleep, as far as is known, in his habitat. No animal of this species ever has reached the United States alive.

The Harry Pearsons, 16mm Addicts, Pack 35mm Tools to Dark Continent on 11,000-Mile Jaunt and Bring Out "African Holiday," Theatrical Film

sten of interest as the plane passes over great herds of wild elephants who seemingly ignore the presence of the ship.

In Nairobi the safari, with its white hunter and his accompanying black boys, is organized. This expedition does not like many of its predecessors travel on foot. Rather it goes in giant auto trucks, with a consequent large reduction in the number of carriers or bearers necessary. The time of year is propitious for the journey. The rains have just ended and the grass is lush, rising to a three or four foot level.

In fact, the grass is high enough to go far to conceal the lions that roam. Some 40 of these are photographed, some as close as 30 feet, out of the 500 that are seen. There are many close-ups of the king of beasts, one of these showing a big boy hooking his teeth into a 600-pound "kill" and dragging it over the ground without seeming effort. But two of these animals are killed.

Just by way of adding a popular superstition, one of the novelties of the film is the "shot" of a lion in a time top, seemingly 30 feet from the ground. Just as we may be sure it really is a lion we see the big fellow leap to the ground from the lower branches.

Fierce Masais Visited

We see a company of native soldiers in uniform doing their allotted stuff, and they show the snap and rhythm of the real thing—as undoubted they are.

There is a visit to the Masai tribe, one of the more primitive and incidentally one of the less scorable. The Pearsons are permitted, however, to photograph the ritual of the tribe prescribed for the elevation of young men to the rank of warrior. That ritual includes the slaying of a bullock and the drinking of its blood by the candidates.

The meat of the bullock then is eaten, raw, by all of the assembled

tribesmen. The adventure ship away when the introduction from the home base, the red mud and the general excitement reaches a level higher than deemed safe for the presence of white men.

Wet Country

The Pearsons proceed to visit the Ankole, leaving one of the fiercest and going to one of the most peaceful of tribes. The Ankole are killers of the soil and owners of cattle, long-horned magnificent specimens.

We see many of the Impella, the jumpers, some of them attaining a clearance of 30 feet. You'll believe it, too, when you see them. They travel, or jump if you will, in flocks.

Then for a bit you sit on the edge of the seat during the killing by a perfect brain shot from the rifle of Mrs. Pearson of a charging elephant approximating eight tons in weight. He is described as a rogue elephant, one proscribed and outlawed for his meanness to his fellows. Perhaps

that's where these big boys get their reputation for intelligence.

After the massive tusks have been removed and the front feet, seemingly as large as the lower half of a flour barrel, have been set aside for later use as Hollywood wastebaskets, the natives fall upon the remains for meat and hide, enough of the latter to last them a year.

A purchase of 50 pounds of trout at Lake Kivu for an expenditure of 25 cents shares interest with some beautiful water shots. And then come the Mountains of the Moon, with towering snow-covered Mount Stanley in the distance. This is a rain country, where the annual precipitation attains 17 feet—a mere matter of 204 inches—which perhaps explains why it is called a wet country.

The Pearsons caught a shot of Stanley on a morning they were told was the first occasion in six months the mount had been visible at their particular location.

There is an interesting shot of a honeybird, that friend of the native who chirps even as he hops over the ground and guides the forager to a tree that is a depository of the honey bees' product. The native takes "his" while the honeybird hovers near by, but the native leaves some for the bird. He believes if he does not the next time the bird will lead or mislead him to a hen or something worse. We even see the bird waiting for the natives to clear out.

Pigmies Stage Show

The pygmies stage a dance for the entertainment and in honor of the visitors. The cameras record a fast-stepping bunch of little folks, reminiscent somehow of those mythical



Galla Lushas staging dance of the rain, starting it at close of day. Believed to be the first time this tribe ever was photographed.

drumming lads of the Catskills who swim into the ken—and out—of Rip van Winkle. But the pygmies are great hunters just as most emphatically they are not farmers. With the bigger boys and girls they will trade the result of the hunt for the product of the soil.

It was the pygmies who brought the Pearsons to the heart of the shaps—that sleek-lined creas seemingly between a zebra and a giraffe—the animal which so far as known never had been seen by a white man before 1901. Natives had told of it to travelers, but until it was seen by a white man they were not believed. In the year mentioned Sir Harry Johnston, British naturalist and explorer, came out of the jungle and reported he had seen such a creature.

It was only through making friends with the pygmies the Pearsons were able to locate one. Then lust was rewarded, however, for they secured close-up shots of considerable length. It is believed to be the first photograph ever made in this habitat, of this rare animal, not one of which ever has reached the United States alive. Its hide has a purple sheen.

Driving Fauna

The last dozen minutes of the sixty this picture holds the screen are especially fast and packed with excitement and motion.

On the way to the snake country the Pearsons photographed an attack by lizards on the papayas seed—an attack which in one night totally decimated the seeds of all vegetation. It is a weird scene and finely and effec-

tively photographed, these myriads of pests clustering so closely it is almost a blanket in appearance.

The snake dance which the photographers hoped to see had been witnessed by but a few white men and never by any white woman. Never had it been photographed by a motion picture camera, the Pearsons had been assured. Mariari, the snake doctor, the head of the cult of dancers, is the absolute dictator of his subjects.

At the opening of the dance snakes are brought from boxes and thrown into the center of a cleared space. There are all sizes and many kinds, or several anyway. There are cobras, puff adders, black mambas, pythons and boomslangs. In one distinct instance, and immediately following a warning to the commentator, we see one of the named and hooded cobras strike a native in the calf of the leg. The blow is unheeded.

Cult Members Immune

The natives are described as being immune to the poison, between the medicine administered by Mariari and the hypnotic state attained during the progress of the dance. Those who are not uncomfortably snake conscious will get an abundance of thrills in this sequence. There will be others who will close their eyes.

In a visit to the Buganda tribe we see women carrying burdens of 50 pounds of wood on their backs besides a baby, doing it in a matter-of-fact manner and without appearance of thinking it a hardship. We see many dozen-foot crocodiles sporting along the banks of the Nile

We see hippos, and so far as known for the first time on the screen under such circumstances, the hippos regale themselves with a sun bath, returning to the water at their convenience.

From below the Murchison Falls there are many unusual shots of Father Nile tumbling down a gorge that narrows in the rock to a width of about eight feet—turns on its side as the commentator sets forth—to get through. It is a sequence that will cling to the memory.

Thrills for Amateurs

The closing photo are of the Lataha, a tribe of men averaging seven feet in height. These muscled of goats stage a dance of the rain for their visitors. It starts as the sun falls below the horizon, as shadows in the accompanying photograph attest. The spears carried by these giants are 20 feet in length, but the easy manner in which they are handled gives no clue to their weight or length. Certainly it's a magnificent race. This fact added to another that through life the members of the tribe adhere to their birthday garb may afford some support to the radicals in their claim that clothes never were any good anywhere.

As we said in the beginning the amateur cinematographers are going to get many a thrill in viewing this picture. They will share two thrills—one with their fellow-amateurs and another with the multitude who as yet know nothing of the joys—and pains—of the camera addict.

G. B.

The Poet-Photographer

THIS EVENING OF March 24 at the Bell and Howell auditorium in Hollywood this writer sat in on a 14mm exhibition by Charles A. Nelson of three examples of his work in Kodachrome. Mr. Nelson is Director of Visual Recreation, with offices in San Francisco. Although he has been a follower actively of motion pictures but four years already he has written a book entitled "Natural Color Film—What It Is and How to Use It." It is slated to be published in April.

After looking at his color stuff on the screen we will take the liberty of and we do not believe the slightest chance in recommending it as authoritative. His titles show he has the soul of the poet, his genius for composition and his eye for color and striking effects that he is an artist, and his pacing, at times, if you will, in his effective bringing out of the best in the great bellying waterfalls, and the definition of his photography

and the clarity and smoothness of his panoramic shots prove his title to kinship with men who have been touched by nature with the photographic splat.

Mr. Nelson opened with a dance of marionettes—a worthwhile subject and one plausibly presenting many difficulties in photographing. His second was "The Aztec Metropolis." Really it was a tour from San Francisco by the sea to Mexico, with many stops along the way, on the ocean front and in the interior. It showed people and structures and places of interest. Among the more spectacular shots were those on the water at the beginning or the end of day.

The third was the tops of the show, "The Song of the Trail," the second of a part of three weeks in the High Sierras in which the photographer fathered a dozen boys on a trip to the roof of the world. Mr. Nelson admits he was carrying responsibilities that in a measure diverted his efforts

at concentration on his photography. But we may forget that.

What he has accomplished undoubtedly has exceeded what he aimed to do—mainly so to arouse the interest of young folks that they will seek the joy of the hills while yet they are young and able to "stand the gruff" of the climbing and the rigorous effort that goes with "packing in" when among the clouds. He will bring to older persons thousands of miles from the scene of his work the glories of the hills and the beauties of the changing moods of nature.

In this three weeks' Mike M. Nelson carried a small Bell and Howell and an Eastman Special. We may believe him when he says looking after the welfare of a dozen boys and traveling ten miles a day changed his photographic style. Nevertheless what he accomplished will put under the spell of enchantment every city dweller or lowlander privileged to see "The Song of the Trail."

Two POPULAR MOVIE MAKERS NOW AT NEW LOW PRICES



THE famous Ciné-Kodak K, most widely used 16 mm. camera, has just been reduced to a figure that makes it a rare bargain, indeed. Finished in genuine leather and shining chromium, the "K" is as smart in appearance as it is in performance. It comes equipped with the Kodak Anastigmat f 1.9 lens, which is interchangeable with seven accessory lenses ranging from a 15 mm. wide angle to a 4-inch telephoto. It loads with 50- or 100-foot rolls of the fine 16 mm. Ciné-Kodak Film. Among its features are two speeds, automatic footage indicator, waist-height reflecting finder and full-vision eye-level finder. Here, certainly, is the buy of the year for particular movie makers.

**CINÉ-KODAK
MODEL K**

\$88⁵⁰

—with Kodak Anastigmat f 1.9 lens, \$106. 11.00, with the matched carrying case for camera, film, extra lens, and filters.



CINÉ-KODAK Eight, Model 60, is the goal of all 8 mm. enthusiasts. Now you can buy this splendid camera at a saving of \$20 under its former price. It's a carefully fabricated little movie maker finished outside in real leather and gleaming chromium. Its interior is as beautifully engine-turned as a fine watch. Its fast f 1.9 lens is interchangeable with a $1\frac{1}{2}$ -inch telephoto (extra) which magnifies three times. The Model 60 has an automatic footage indicator, built-in exposure guide, snap-back carrying handle incorporating its full-vision finder system. Ask your Ciné-Kodak dealer to show you the de luxe "60." Now, more than ever before, it's worth the difference.

**CINÉ-KODAK EIGHT
MODEL 60**

\$71⁵⁰

—with Kodak Anastigmat f 1.9 lens, \$92.50 with matched carrying case for camera, accessory lens, film, and filters.

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.

RIAN JAMES is going a-gypsy-ing to the South Seas. Just to make the vagabondage 100 percent complete he will take a battery of 16mm cameras, backed up by all the doodads and gadgets that go along to aid in confusing the less expert photographers.

For this prospective traveler is no new-comer in the realm of cameras and lenses. Literally, he has in the not remote past shot thousands and thousands of feet of that same 16mm stuff—that is until it became a grim question whether he would quit cutting film through the night or get back to his neglected typewriter and its awaiting manuscript.

With Mrs. James, this restless son of Texas, who admits he was born in the Lone Star State that he might be near his mother in his less robust years, plans to leave Los Angeles in May. With a professional crew of two and an amateur guest crew of five the party of nine will sail on the writer's 67-foot schooner *Hispagnola*, built to accommodate twelve. The craft carries a 125-horsepower motor.

Cine Equipment

The voyage may last any part of a year. There will be no hard and fast itinerary, that being left largely on the lap of the gods, which may be another way of saying as may be determined by the whims of the majority. There is one caveat, however, that definitely is hated, along with the approximate time that anchor will be dropped.

That is Tahiti where the party will be situated from the coming December until the following March.



Mr. and Mrs. Rian James.

RIAN JAMES TO SOUTH SEAS A-GYPSYING GOES

The motion picture equipment the skipper will carry includes a Bell and Howell 16mm camera with color attachment, an Eastman 16mm camera, a Kodascope projector and a complete cutting outfit. All shooting will be from straight negative. Stills will be taken care of with a Leica, a Graflex and two other cameras. Film will be stored in a vault the temperature of which is electrically controlled. For night stills the ship will carry three groos of flash lamps.

Few amateur photographers ever have embarked on a long journey overseas on picturemaking bent with a mutual background matching that of Mr. and Mrs. James. In the first place the skipper long has had a pronounced yen for the water. The *Hispagnola* is his second boat. Mrs. James like her husband is a good sailor. The two also share a pronounced urge to transfer the world and its work to film. And they have had abundant experience and together burned much midnight oil in cutting their own pictures.

It has been announced the skipper will make one or more feature length 16mm subjects while away—that he will write his own stories, that he will direct them and then just to make the job complete will photograph them. First hand will be hers if there be any truth in that old saw about the rocks. For some time now there has been a belief amounting to a conviction that in the making of pictures the saw is right.

Who Said Amateur?

Certainly on the writing side Rian James will be unable to make as an amateur. There he is full-fedged professional. Neither can it be said quite in all truth that as a director he is an amateur. With one who knows life as he has found it and who has faced death as he has faced it, who knows drama in theory and who remembers it when it confronts him; who knows the traditions of stage and screen and who has rubbed elbows on Broadway and in Hollywood with the makers of

plays and pictures, and who, above all these, is himself a writer of drama surely as a director it will be conceded he rates at least near professional.

On the photographic side the reader may form his own conclusions. Perhaps the same reader may have sufficient faith in the skipper's skill with the camera to share with the writer of these lines in expressing in advance a wish to get a peek at any stuff that finally may come from the writer-director-amateur's editing.

That stuff ought to be good.

Let's go a little further into that background thing to which reference has just been made. When the editor got a tip Rian James was planning a sea trip and that he would make 16mm pictures he knew that right there must be a tale to interest readers of *The American Cinematographer*.

A Den and a Half

Later an appointment was made for a chat at the James home in Beverly Hills. The visitor was shown into the writer's workshop to await the coming of the man of the house, delayed unexpectedly at a studio. The visitor slid into an easy chair and his eyes roamed. To one congenitally stung by an outdoor bee, a sting his victim never had been able to get out of his system, the room had rare appeal.

For it was an outdoor man's den as well as a workshop. It had been so designed in the beginning. Over the writer's desk was a skylight, with a protective green shade. The ceiling was beamed. Aside from the heavily concreted fireplace the walls were in the natural wood. Windows were on two sides. Bookshelves in quadruple banks were on three sides—and they were filled to the limit nearly all of the books being first editions, for which the owner has a fondness and of which he possesses a couple of thousand volumes.

Elephants bronze and otherwise, threaded the shelves. There may have been thirty of them. Of ship's lanterns, in unique designs, there were

Soldier - Columnist - Scenarist Packing 16mm Cameras Turns To Vagabondage for a Year Aboard Good Ship Hispaniola

half a dozen of more. A pipe rack on an ash tray was in the form of a ship's wheel. A paperweight was of windlass design, with a double turn of rope. There was a husky block that might have done service on a wind-jammer.

A table lamp carried a painting of a sleep on its shade, with a ship's wheel mounted on its standard. Then the roving eyes picked up a pair of heavily varnished tans, stacked near the fireplace. Just above the near lounge on which the visitor was resting was a spacious and well-equipped cocktail tray suspended from a rope attached to its rim. Loops at stern and stern provided handles for conveying the raft.

Young Arrived

Conspicuous on a wall were three shotguns and a rifle—the latter powerful enough to stop a tank. By the door was another rifle in its host. A couple of pairs of full-grown 45s and another couple looking like 38s on a 45 base along with a pair of spurs decorated a shelf. Across from these a broad-brimmed hat seemed to complete the Texas atmosphere.

The visitor envisioned a circumstance or two where the constituent parts of this young arsenal might seem to be very comforting companions in some near or distant part of the world.

The reporter's speculative romancing was interrupted by the return of the householder. The visitor declined to concede any apologies for delayed arrival were due. Instead the thanks of the latter were extended for the rare visual entertainment.

Ran James is an unusually young looking man for a World War veteran of more than four years standing—for a soldier who enlisted in Canada and then when the United States got into the mess had himself released for service with Uncle Sam.

He is youthful looking for a man who has encountered the dangers of an aviator and a parachutist. As to the latter he is reported to have made his

twenty-sixth jump to learn for himself if it were true there was a slim chance for a man ever successfully to make more than twenty-five jumps. And he has undertaken the delayed opening of the chute that he might add to his experiences the sensation of dropping as a dead weight.

Eagle Columnist

Following the war the veteran in turn was advertising writer, reporter, war correspondent, feature syndicate salesman and columnist in the course of his wanderings he has not visited thirty-one countries.

Perhaps his better known work, in the past in any event, was through his affiliation with The Brooklyn Eagle. There for seven years he wrote for the Sunday magazine of his paper "The Lanky Way" Weekdays he contributed "Reverting to Type," his comments on what he saw and heard in carrying out his assignment as "Brooklyn Ambassador to Broadway," which The Eagle proudly proclaimed him.

Then for a year after coming to Hollywood and while engaged in screen writing the columnist continued his work for The Eagle, relinquishing it with extreme regret and only against the coming of the day he may invent some scheme whereby he may work in Brooklyn and live in California.

Asked if his party for the South Seas was complete the writer replied it was not quite. He had received eighty applications up to that time, but because of the absolute urgency of signing a congenial group he was exercising great care in the selection. He had declined some flattering monetary offers from prospective passengers, as he was determined to make it entirely a democratic group, one in which all would be workers.

The three pups of the James household are slated to be members of the party and possibly also of the troupe that will be organized. One of these, an unusually intelligent wire-haired terrier, already is a movie hero, hav-

ing been starred in "Life in the Day of a Dog," written and photographed by his master.

"Do you plan to do any newspaper work or any other writing while on your trip?" the visitor asked his host.

"Probably no newspaper work," was the answer. "I expect to do a book or two for my publishers, though." He smiled, again, as he added "Just have to eat you know."

LEICA AUXILIARY RANGE FINDERS

E. Leitz, Inc., announces that three types of Leica range finders are now available for use with cameras of various sizes, including professional and amateur motion picture cameras and large "still" cameras. The "Foller" is for miniature and vest pocket cameras where the range finder can be relatively close to the lens.

It is graduated through 300 feet from 3 1/2 feet to infinity. The "Fencer" is for large "still" cameras and 16mm and 8mm amateur movie cameras. It is graduated from 1 1/2 feet through 150 feet to infinity. This type has a compensation of 5 inches, so it may be placed conveniently at the back of the camera, and yet read accurately for the footage scale which is calculated from the lens position.

For 35mm motion picture cameras the "Felon" range finder is announced. It is calibrated from 2 feet through 100 feet to infinity, and has a compensation of 9 inches. These range finders are described in a new Leica leaflet, No. 7574a, available from E. Leitz' New York office.



Newlined Schooner Hispaniola.

SERGEANT TEOREY IS OUTSTANDING DISCIPLE OF 8mm MOVIE MAKING

By William Stull, A.S.C.

OFFICIALLY he is First Sergeant Robert W. Teorey, Senior Registered Man, Marine Corps Detach, U. S. Cruiser "Chester." Unofficially he is Bob Teorey, 8mm. sharpshooter and member (when in port) of the Los Angeles Swim Club. By reckoning, he is an outstanding exponent of amateur movie making as it should be practiced.

Teorey's movies do credit to the traditional efficiency of the Marines. Technically he keeps "well in hand." He would probably be the first to resent any implication that exposure, filtering and lighting give him no trouble—but on the screen his pictures flow with an effortless smoothness that conceals all hints of technical problems. Moreover, every scene seems to have been made with a purpose. And by painstaking attention to the details of editing, continuity, and title-craft, he makes even his "home-movies" well worth seeing.

In all of this, Mrs. Teorey plays a quiet but definite part. Far from being a "camera widow," she is so enthusiastic about the cine-filming hobby as is her husband. While the Sergeant concentrates on photography, outline and title making, she devotes her attention to the equally important problems of continuity and title writing. Each perfectly supplements the other's inclinations.

Like many another ciné-filmer, Teorey's interest in the hobby goes back many years, but his active filming dates from the relatively recent introduction of 8mm. After what he admits seemed like an eternity of window shopping, gazing yearningly at deluxe 16mm. cinebores, he was one of the first to march in and buy when the Cine-Kodak 8 appeared. Today he uses a newer, \$1.9 version of this same camera, which he makes perform in a way to excite the envy of more than a few adherents of the larger film.

Stresses Continuity

Teorey would probably make a successful newspaper cameraman, for he has an instinctive appreciation for good film subjects. Ranging land and sea with his cinebox, he "covers" his story completely, never overlooking intimate action in his natural desire to film pictorial scenic shots, and on the alert for bits of human interest whenever he is. When he gets home he has a detailed record of his cruise.

At this point Mrs. Teorey enters the picture. While her husband "rough cuts" the footage, getting the scenes assembled in their correct order, her active mind searches for a

theme to knit the scenes into a coherent picture. Then they collaborate on any needed "added scenes" for this continuity and in writing and photographing the titles.

The Teoreys' first major production was a film record of the Chester's cruise to the Orient carrying the late Secretary of War Dera. The framework upon which this is hung is furnished by the Sergeant's letters to his wife. So complete was Teorey's coverage of his story that only a few added scenes showing Mrs. Teorey receiving and reading the letter were needed. The idea also promoted the use of typewritten title cards.

An insert of the letter and a sheet of snapshots reads, " . . . and until I get home the enclosed snapshots will give you some idea of the cruise." As she looks at the first snapshot the picture opens showing the Secretary of War boarding the Chester.

Balances Scenery and Action

From then on the scenes carry one at a rapid pace from San Francisco to Hawaii and then across the Pacific to Japan. In his setting Teorey has achieved an excellent balance between shots of the official ceremonies relating to the ship's distinguished passenger, glimpses of everyday life aboard and scenery at the points visited.

There are colorful shots of the formal calls of high Japanese officials in Yokohama; intimate close-ups of Secretary Dera and the Chester's officers; and scenic shots ashore and afloat which would gladden the heart of any photographer.

There are telling shots of Chinese life in Shanghai and Hongkong. One of these speaks eloquently of the poverty of China's millions. A family living on a small sampson hovers around the cruiser, hungrily collecting the garbage thrown overboard. The father makes a downward sweep with a long-handled net; a second later a telephoto shot shows his little girl calling the morsel he salvaged.

Teorey admits two things were against him in this picture—the weather everywhere bad, and a shortage of film. "In Honolulu, Tokio, and Manila," he says, "I had no trouble getting 8mm. film; but in some of the other ports it wasn't so easy. When I caught myself running low on film I'd try to postpone every possible scene until I had plenty of film."

"Once, arriving in Manila, we were greeted by a delegation of Filipinos in most unusual outrigger canoes. I got a few shots of them, but determined to shoot more when I had been ashore and replenished my film supply. But the next day, when I had the film they were gone. They were hill people, down especially to greet the Secretary."

Filmed President's Cruise

Teorey's next important film was the story of the Chester's cruise to South America, conveying the President. This film was bound together by presentation as a "movie party." The opening scene shows Teorey coming home after the cruise. Next, his



First Sergeant Teorey

friends arrive to see his pictures. They seat themselves while Teeory is shown setting up the projector and the picture proceeds.

The film is quite as interesting as the China cruise production and, thanks to more camera wisdom and the virtues of a 23-A filter for sea and sky shots, more effective photographically. The titles are exceptionally good, and there are several animated maps, all home-made with the Sergeant's C.K.R.¹

This filming Marime is definitely a "Gadgeteer, First Class." He has an inventive mind and enjoys building practical gadgets that widen the scope of his camerawork. Some of these devices enable him to do camera tricks no purchased accessories include. Others serve as substitutes for expensive commercial accessories. All of them were made simply from discarded odds and ends that can be found around any home.

One of the hardest and simplest was achieved simply by bending the handle of his Teatrite tripod-head. Not only does this give him a more convenient grip when making panning shots, but by simply pulling the handle down fully he can fold the tripod without having to remove the tilting handle.¹

For Camera Whirls

In one of Teeory's shoregoing films he used quick whirls of the camera for rapid transitions. When asked how he did that he brought out a most amazing gadget and confessed it cost him exactly nothing. But it does the trick! Two strips of wood, joined in L shape, carry the camera, which is held in place by an ordinary wing bolt screwing into the tripod socket. Attached to the upright of the L, and in line with the axis of the lens, is a length of metal rod.

On this, hung at right angles in a simple bearing, is a strip of tubing threaded at the bottom to fit the tripod's screw. Beyond the bearing the shaft continues to a handle which began life as a photograph crank. When the device is screwed to the tripod, and the camera fitted in its cradle, turning the crank spins the camera neatly around the axis of its lens. And when the camera is held steady in the upside-down position the making of reversed-motion shots is greatly simplified.¹

Gadgeteer Teeory blushes when he admits that his excellent twin-photofood floodlight required the outlay of a whole nickel. The stand was the base of an old dressmaker's form salvaged from an attic. Its upper extension was a salvaged strap of metal rod.

The two reflectors, which began their careers as small aluminum saucepans, are carried on the ends of two arms made from discarded gaspipe. These arms are on a flexible, universal-joint mounting made from bits of old strap metal and bolts. The lamp sockets were likewise salvaged from the family junk box. But he had to buy a pair of five-cent lamphade fittings to clamp the lamp socket to the saucepan reflectors.

Retrieves Percolator

Most recently Teeory has made a serviceable spotlight out of a discarded percolator and an old aluminum double boiler. In place of the percolator's glass top is a plano-convex lens from an old flashlight. The body of the lamp is made by cutting away the bottom of the percolator and fitting this shell into the top of the double boiler. The holes that originally took the handle bolts on the utensils serve now to take bolts that hold the lamphouse together.

The bottom of the percolator, suitably trimmed down, serves as a reflector behind the photofood globe, which is screwed horizontally in an ordinary socket. Ventilation is provided through several holes punched in the lower part of the lamphouse, and through the opening left by removing the spout of the coffee pot. A fat, raised metal light baffle is placed over this hole.

Forming is done very simply. The lamp socket is fixed to a length of sturdy brass tube, which passes out through the back end of the lamp and through a set screw collar soldered to the pan. Moving this rod in and out "spots" or "floods" the beam; the feed wire to the globe is inside the rod. The lamp mounts on the same stand as his five-cent floodlight—and its cost was nil.

Home Movies With a Purpose

Ashore Teeory resolutely refuses to make movies of his friends unless they are willing to "do something definite." He gives two reasons for this. "First of all," he says, "I'm selfish. I want folks to look at my pictures. Nobody cares to look a second time if you insist them with haphazard shots of people doing aimless silly things. Second, people aren't natural in front of a movie camera unless they have something definite to do."

"We've made one or two simple little photoplaylets, but as I'm ashore so little most of our films have had to be simpler and more inexpressive. We make little skits—undates on film. The ideas for these come from all sorts

Continued on Page 169



Top, Sergeant Teeory's collapsed spotlight. Center, the whirling camera gadget. Bottom, the five-cent twin floodlight.



AMATEUR MOVIE CLUB NEWS

1. A. CINEMA CLUB HEARS TALKS ON FILM

The March meeting of the Los Angeles Cinema Club was devoted to discussions and demonstrations of the leading types of 16mm. film. Eastman, Agfa, Pellex, Hollywoodland and Rex products were represented. Hall Todd, the Pellex representative, offered an unusual demonstration of Super-Pellex by submitting two rolls to tests made by the Club's Technical Committee at the start of the meeting, processing the film and later returning to show it on the screen before the meeting adjourned.

Irving H. Andrews, the Eastman representative, spoke at considerable length and gave several valuable facts relative to Eastman's various cine films. The firm's sensitivity ratings, he revealed, based on an arbitrary figure of 198, gives the following speed factors for the four types of Eastman black-and-white reversed films:

	Percent
8mm. Cine-Kodak film	59
16mm. Safety Film	120
Regular Panchromatic	160
Super-Sensitive Pan	240

It is only chance, Mr. Andrews stated, that striking off the 0 on these ratings gives the Weston speed ratings.

Three Types of Pan

He stated that the Kodak laboratories had evolved three types of commercial panchromatization, referred to as types A, B, and C. The type A was the earliest, and is featured by a low red sensitivity. The regular 16mm. panchromatic reversed film is now the only representative of this group in the cine field. The type C emulsion has a higher red sensitivity and is represented by C-K 8mm. film, Kodak Safety Film and SuperSensitive.

These types of panchromatization have an important bearing on filtering. The type C emulsions require no increase in exposure for such yellow filters as the K-2 and CK2, while with type A these filters have a fac-

tor of 2. The factor for the orange G filter is from 3 to 4½ with the type A emulsions, and only 2½ with the type C. The red 23-A filter has a factor of 7 on type A emulsions, and only 3½ with type C.

Discussing Kodachrome, Andrews stated this film now rates at 80 percent (Weston 8) on the sensitivity scale.

He stressed the fact that there are only four proper uses of the Kodachrome haze filter: 1, to absorb the excess of ultra-violet encountered at high altitudes; 2, to reduce the tendency toward bluish shadows in snow scenes; 3, to curb the tendency toward a bluish cast on overcast hazy days; 4, to curtail the bluish haze on extremely distant long-shots. The latter use, he pointed out, was largely a matter of personal preference; the filter is not mandatory for such scenes.

Advises Against Delay

Speaking of the newer Type A Kodachrome for use under artificial light, he stressed that it was made for use with Photoflood globes, and will not work satisfactorily with ordinary Mazda globes, which give a yellower light. If the same toll is to be used both indoors and out, he advised choosing type A Kodachrome and making the exposures with the proper Type A daylight filter. He urged against leaving a partly-exposed roll of Kodachrome in the camera, as the latent image deteriorates, and the emulsion is likely to stick in the aperture. Kodachrome processing stations are now operating in Rochester, Chicago, Los Angeles, London, Paris, Berlin and Melbourne, Australia.

Agfa's demonstration film had unfortunately been delayed in the mail, and the improvised film-tests shown, made by a local photographer, were admittedly incomplete.

Hollywoodland Studios and Rex Film Laboratory each showed two types of reversed-positive film, each with a Weston rating of 8 for daylight. Hollywoodland's Super film was stated to have a Weston speed of 8 for Mazda lighting.

The meeting was pronounced one of the most constructive yet held. President Bailey and the Program and

Technical Committees receiving hearty congratulations.

PARAMOUNT CLUB DISCUSSES COLOR

The young and thriving Paramount Movie Club, composed of non-photographic workers in the Paramount Studio, held its third meeting on March 12. The meeting was devoted to a discussion of Kodachrome filming. Gordon A. Chambers of the Eastman Kodak Company's Hollywood artistic staff was the speaker of the evening and gave a noteworthy talk on Kodachrome and its use. He also was pressed into service to criticize several Kodachrome pictures made by members of the club.

William Stull, A.S.C., representing the American Cinematographer Magazine, was introduced and spoke briefly, congratulating the club on interesting studio employees in personal movie making.

The feature of the evening was a showing of the Kodachrome feature, "The Story of Isabella," filmed by F. P. Jackson. This film, winner of a special award in the American Cinematographer's 1935 Contest, was presented with its full sound accompaniment.

It was decided to change the club's regular meeting date to the first Thursday of each month, to avoid conflict with meetings of other studio groups. Wilton Carnell is the president of the Paramount Movie Club and Marilyn Webber secretary.

STATEN ISLAND CINEMA MEETS

At a meeting March 18 of the Staten Island Cinema Club H. P. Rockwell, Jr., of the Weston Electrical Instrument Corporation gave a talk, illustrated by lantern slides, on exposure problems and the use of the Weston Exposure Meter.

The films shown were "White North," winner of A.S.C. award, "The First Year," the club's own production, recording the birth and growth of the organization, "Sequoia," a scenic film of the redwood forests by Frank E. Gurnell, and "Brave Canyon Wanderland," in color, by Frank E. Gurnell. Both of Mr. Gurnell's films were

accompanied by recorded music and sound effects. The latter film won the 1936 contest of the Metropolitan Motion Picture Club.

LOS ANGELES 8MM CLUB

The regular meeting of the Los Angeles Eight Millimeter Club was held in the auditorium of Eastman Kodak Company, 6796 Santa Monica boulevard, March 9. President F. R. Lescher was in the chair.

Membership buttons were presented by Vice President John E. Walter to five new members. Four women now are members.

Due to the feminine increase in membership, President Lescher appointed a Ladies Activities Committee, consisting of Mrs. Alva Cadarette chairman, with Mrs. Lucille M. Linn, assistant.

The president announced the secretary was reviving his filing system of members and requested members present to fill out new application blanks prepared by the secretary so the officers might be more helpful.

A sample copy of *Thru the Filter* (proposed new club publication) was passed to the members, and it was decided to table further discussion until the April meeting.

The usual ten-minute period devoted to the technical committee for answering queries appeared to be popular among members.

A short period was set aside for members who brought films for analysis to project their films and allowing the technical committee to judge their pictures. From the number of films submitted this feature looks as if it is taking the fancy of members.

The president introduced Jim Barker of the Max Factor make-up studios, a man of wide experience in professional work in the picture plants. Bosz Vogel, a club member, volunteered to serve as the subject for the demonstration, which was that of decolouring the age, or may be more. Anyway, it was of exceeding interest. The session was a long one, but no one thought of walking out.

Mr. Barker will return for the next meeting. A full house is assured in advance.

PHILADELPHIA CINEMA

At the monthly meeting March 9 of the Philadelphia Cinema Club six members showed films. Also shown on the screen was a composite film of the club's first anniversary banquet in February, photographed by a quartet of the members. The exhibit was a success.

One of the features of the show was "Wanderlust; or, A Trip to England," 600 feet of Kodachrome, photo-

graphed by Mr. and Mrs. F. N. Hirst. The subject included some remarkable scenes. Matching in attractiveness the work in the field was the thing, described as "exceptional in its brilliancy."

Using jet black paper as a base, a silver typewriter ribbon and hand-painted flowers and objects, in proportion to the typewriter letters, Mr. Hirst was able to develop a combination of colors in his title that will set a mark plenty tough for his fellow-members to go after.

"Wanderlust" has been highly praised by officials in the Eastman plant, citing it as an example of notable photography. The company made frame enlargements from a number of the scenes. Considering Mr. Hirst used nothing but 8.5 fixed focal lens, no meter and no tripod, the results are all the more remarkable.

Paul J. Gelser has been named chairman of the membership committee and it is expected the club shortly will reach its limit of seventy-five. Already the roster is close to sixty.

The affairs of the club were so satisfactorily conducted during the last year the members at the election held during the course of the evening re-elected all of the incumbents. With the committees they are: R. M. Host, president; G. A. Pittman, vice president; A. L. O. Raach, secretary-treasurer.

Executive committee, H. M. Sharp, B. N. Levene and the officers; technical committee, chairman, H. R. Wilson; program committee, chairman, Ripley W. Dugbee; publications committee, chairman, B. N. Levene; membership committee, chairman, Paul J. Gelser.

BLUE BELL ENTERTAINS

The members of all camera clubs and their friends in metropolitan Detroit are cordially invited to meet with the Blue Bell Camera Club in the auditorium of the Telephone Building Wednesday evening, April 7, at 8 o'clock.

Arrangements have been made to have Hillary G. Bailey, F.R.P.S., tell about recent developments in photographic materials and technique. This is an excellent opportunity to hear about what is new. It will not be a taste talk.

As publicity and publications manager for Agfa-Ansco Mr. Bailey knows what is going on and he is familiar with the amateur point of view. As a writer and as a pictorialist he has been well known for many years.

A 16mm sound feature will be presented by the movie section of the Club.

The Detroit clubs may look forward to this meeting for a rare treat.

CINEMA CLUB SPONSORS EXPOSITION

The Los Angeles Cinema Club will sponsor an exposition of amateur motion picture cameras and equipment on Tuesday, April 6, at the Arcady Hotel, Wilshire boulevard and Rampart, Los Angeles.

This display of the latest 8 and 16 millimeter equipment will be worthy of the industry represented, being such firms as Bell and Howell, Eastman, Victor, Simplex, Crug Movie Supply Company, with Ampco, Keystone and accessories. Harman will have a filter exhibit, Thalhhammer an exhibit of tripods and the amateur movie magazines will be represented.

In addition to the movies and movie equipment there will be a rather complete display of camcorder cameras. Everyone interested in such an exposition is cordially invited to attend during the afternoons of April 6.

LeRoy H. Bailey, M.D., is president of the Los Angeles Cinema Club and Dr. Freebairn is secretary-treasurer.

CINE CLUB HEARS TALK ON FILTERS

The Cinema Club of San Francisco, which is, as its letterhead sets forth, "an organization of amateur cinematographers," was entertained at its meeting March 30 by Member David Rodfield by a talk on filters, with an accompanying demonstration.

Shown on the screen were some of the pictures taken at the February demonstration as well as 540 feet of Kodachrome exhibited by Member L. A. Sharaeff entitled "Winter in Yosemite."

The program committee has decided to hold a contest, limited to 100 feet of 16mm or 25 feet of 8mm, opening April 1 and ending May 25. The March meeting was to announce a title for the competition and the list of prizes.

At the preceding session of the club Member Gordon Michie and Mrs. Michie produced a short skit filmed by Members Michie, Breyman and Dr. Thatcher. Mr. and Mrs. Vernon Hallett, who played the scenes in a subject tabulated, demonstrated much about lighting to their fellow-members.

RUMANIA PLANS LABS

The Rumanian weekly magazine *Memento* reports an order has been given for the payment of 20 million lei (\$140,000) from the National Cinematography Fund to the Ministry of Education for the furnishing of scientific laboratories in the universities, reports American Consul Sheldon T. Mills. The Journal of the Council of Ministers upon which this decision is said to have been based, has not been published.

GE Announces 100-Watt Lamp Giving Continuous Flashes

ANSWERING an urgent demand by commercial photographers, particularly by those engaged in portrait work, for a lighter, more economical, and effective light source, General Electric lighting engineers at Nela Park announce as well under way development of a combination 100-watt mercury lamp and a compact control mechanism by means of which one brilliant "flood-flash" after another can be produced.

The Flood-Flash lamp and its control device, when perfected, will be made available to photographers through the Mazda lamp manufacturers.

While the new Flood-Flash lamp is about as effective, photographically, as a No. 30 Photoflash lamp, the Flood-Flash lamp may be flashed hundreds of times, whereas the Photoflash lamp can be flashed but once.

The new development capitalizes a striking characteristic of the unique 100-watt mercury lamp, namely, its ability to withstand an untold number of sudden powerful "doses" of electrical energy, to each of which it responds by emitting a brilliant lightning-like flash. These flashes, laboratory experts explain, can be made to occur at will, each within so brief a twinkling as one-sixtieth of a second. And if desired, a peak brilliancy of several million lumens can be produced.

Present laboratory specimens of the new lamp have been designed to work most efficiently at normal studio exposures, that is from one-twentieth to one-fiftieth of a second, and with the aid of either a mechanical or electrical synchronizer.

Material Economies

That the Flood-Flash development holds promise of making possible material economies and efficiencies is indicated by the following known facts:

Use of the new lamp eliminates the customary excessive heat generated by conventional lighting equipment in most studios. Wattage consumption for a single flash of not more than one-twentieth of a second amounts to only five watt-hours or thereabouts. The phenomenally great amount of light produced momentarily permits an instantaneous exposure. Actual photography with the lamp shows that its flash "stops" ordinary motion, permitting interesting and clear pictures

of such subjects as children and house pets. Ease of synchronization, the experts said, is another decided point of advantage.

The new lamp, an off-shoot of present higher wattage mercury vapor lamps in use both in this country and abroad, and its control device are strictly American achievements, each having been developed in the Nela Park laboratories. A relatively small bulb-within-a-bulb, the Flood-Flash lamp is the result of recent research aimed at making an economical mercury lamp that will operate at low

voltage, yet get away from high voltage starting requirements.

Compact Arrangement

The outer bulb of this new 100-watt mercury lamp has a diameter of 1½ inches and an all-over length of less than six inches. It consists of a tubular-shaped protecting envelope of soft glass. The inner bulb, also tubular, but about the size of a stubby fat thumb, is made of extra-hard heat-resisting glass. This hollow glass "thumb" is only two inches long and about an inch in diameter. Within is a small amount of mercury, and enough argon gas to "start" the lamp.

The chief purpose of the outer bulb is to protect the inner bulb from drafts and to let the heat of the lamp operate at reasonably uniform temperatures. It also causes the lamp to operate at the proper temperature needed to fully vaporize the considerable amount of free mercury in the inner bulb.

The G-E Flood-Flash Control mechanism—in a bit about the size of a workman's lunch box—governs the duration of the flash. It includes a reactor or "choke" governing device designed to keep the lamp from "racing away with itself" while in operation.

Wabash Claims Flash Gives Greater Light

For the first time since photoflash lamps were invented several years ago a radically new type called Superflash has been developed and perfected, reports the Wabash Photolamp Corporation of Brooklyn, which has been experimenting for some time with flash photography and flash bulbs.

The new lamp is claimed to give 50 percent more total illumination than the old type and to be the first photoflash lamp the design and construction of which permit a definite exact control of flashing characteristics.

Unlike the old type, the light producing medium of the Superflash is a fine hydrocarbon wire the exactly measured diameter of which predetermines the timing characteristics of the flash, and where the exactly measured length predetermines the intensity and volume of light, so that uniform identical results are secured with every flash.

Another radical innovation in photoflash bulbs is the blue Safety Spot which each Superflash carries as protection against misses, spoiled negatives and exploding bulbs. Explosions of photoflash bulbs are caused by air seeping into the bulb, but if air enters the Superflash bulb the Safety Spot turns pink, thus warning the photographer to use only perfect blue spot bulbs.



Unmistaken picture of Tuffy, showing how Floodflash "stopped" his motions as he pawed the air and waved his hind ears in a comical attempt to stand on his hind legs.

CINNING ABROAD AT HOME

By Albert N. Mueller, M. D.

MOST EVERYONE harbors an innate desire to visit foreign lands and see how other people live, work and play; and where possible call on their kin-folks. . . . The Cinema News Reels help stimulate this popular interest and keep alive the "wanderlust" instinct, the dreams that one hopes may some day come true.

The immediate pleasure of traveling, aside from new friendships gained, is to look at nature, with awe, at its grandeur and mystery. Later the traveler returning homeward, as retrospect and meditation, realizes that he has a richer understanding of life.

For those who are unable to go abroad for various reasons, such as finances, time, health, etc., the United States affords within its confines and contiguous borders many of the thrills, scenery, fiestas, sports, and foreign native atmosphere which when filmed can be an interesting substitute for an around the world tour.

There is an old saying that the grass always seems greener in our neighbor's field and that we fail to appreciate what wonderful advantages our own native land affords. Let us, therefore, take an imaginary "tour abroad," a Cinematic Globe Trotter in America.

West Coast Magic

Ever mindful of composition and proper continuity, our scenario may start at a steamship dock filming the departure of an ocean liner with all the glamour and excitement present at sailing; or a scene in a home of the family looking at travel literature and discussing a prospective cruise. The next scene or title can show a change in plans and the decision to stay at home and "See America First."

The state of California is the amateur filmer's paradise—for within its borders are situated the requirements necessary to represent many nationalities; as the professional cinema movie companies have discovered and catalogued locations representing Alaska, Holy Land, Russia, Rural England, French Riviera, Italian villas,

Holland, Ireland, Black Forest, India, Flanders, Austrian Tyrol, Alps, Japanese cherry blossoms, Spanish Main, English coast, Arabian desert, Malay coast, South America, Dead Sea (Salt-ton Sea), and the Sahara.

Our large cities, such as New York, Chicago, San Francisco, Los Angeles, etc., with their cosmopolitan population present a remarkable opportunity for filming a variety of nationalities. Here one may see the world represented in native costume when celebrating its weddings, birthdays and other anniversaries, dances, holy days, and amusements such as puppet shows.

Many of the parades and celebrations abroad have their counterpart here, such as the Mardi Gras, New Orleans (somewhat like the French Riviera

fete), the New Year's Mammoth parade, Philadelphia; also the flower tournaments at Pasadena, Calif., and Portland, Ore.; "Old Spanish Days Fiesta," Santa Barbara, takes place in August, and the Tulip Parade, Holland, Mich.

The Classic at Home

We have picturesque cathedrals, gables, ancient and modern, with Gothic architecture and beautiful art glass windows, of priceless value. For instance, the Trinity Episcopal Church, Rock Island, Ill., has two altar panels by La Falga, considered classic and among his best produced.

In the Forest Lawn Memorial Park, Glendale, Calif., is a large stained glass reproduction of the famous "Lord's Last Supper" painting. Also there are numerous examples of mosaic work as exemplified by the exterior of the Stanford University Chapel, Palo Alto, California.

The old Spanish Missions skirting the Pacific Coast, because of their picturesque and colorful quaintness, easily could fill several reels. Founded by the Franciscan Fathers, in the early days of California settlement, for the conversion of the Indians, they were built along the winding trails called El Camino Real or King's Highway. They extended from San Diego to San Francisco and were constructed of adobe, with roofs of hand-made red tile. Each one is of a typical Spanish architecture, with colonades, patios, old walled flower gardens, and fountains.

Todas many have been restored and are inhabited by monks as of old. San Fernando Mission, near Los Angeles, is a fine example of an old world monastery with its clustered charm and ever present bell tower.

Customs Changing

Skating is one of the world's oldest sports, dramatic and exhilarating. Yet it is only in recent years that it has become popular in the United States, and a most rapid growth is predicted.



Albert N. Mueller, M. D.

Continued on Page 178



"Still" from Projected
16mm. Frames

HERE'S THE ANSWER

By A.S.C. MEMBERS

I wish to project on a screen "stills" of 16mm film and to rephotograph them with a regular still camera. What would be the strongest lamp which could be used in the projector without burning the film? What type of lens would be used in the still camera, and what exposure? Would it be possible to use a translucent screen and photograph the projection from the rear of such a screen?

EDMUND A. GILLER,
Brooklyn

Since you do not say what type of projector you are using we cannot say what would be the strongest lamp you could safely use. If the heat-absorbing safety shutter of the projector is not thoroughly efficient, and if the lamp does not have a force fan to keep a current of cooling air moving past it, you will not be able to use so strong a lamp as you could with an efficient safety shutter and a force-ventilated lamphouse. The best source to turn for the answer to this question is the firm that designed and built your projector.

The lens used in your still-camera should be free from distorting aberrations: a good anastigmat is definitely preferable. Since you are photographing an image on a flat screen you must be able to focus your lens sharply on this screen. Since the image is all in one plane, depth of focus is not particularly necessary.

Since your image is not moving you can give as long an exposure as necessary. The exposure of course depends on the speed of the plate or film you use, upon the size of the screen and the amount of light reflected from it. The best guide to exposure is an accurate photometric exposure meter.

It is quite possible to use a translucent screen. In some cases you may get better illumination this way, and you will certainly find it easier to get a proper angle on the projected picture. On the other hand you are likely to get a "hot spot" or area in the center of the screen where there is greatly more illumination than in the rest of the projected image, thereby

overexposing the center of your picture.

All told, a simple way to get the same result—still pictures from your movie frames—is to copy or enlarge direct from the sub-standard film itself. I suggest that you read the article on that subject which appears elsewhere in this issue.

JEROME H. ASH, A.S.C.

Finer Parallax in Close Shots

What do professional men with sub-standard outfits do about parallax when shooting closer than 15 feet? At a distance of five or six feet with a telephoto lens how do they follow motion, as of a bee gathering honey, for instance, and keep the image in its proper place for good composition?

I have found the viewfinder of my 16mm. camera very unsatisfactory for good close-ups. What I want is a finder that can be adjusted for parallax, image right-side-up, large and clear, and one in which the image won't shift when the eye is moved slightly up or down or from side to side.

HENRY WASHBURN,
Santa Cruz, Calif.

In general, unless your camera is one of the very few the finders of which make some attempt to correct for parallax on close shots, you will simply have to learn to allow for parallax. Such a finder as you ask for could be made, but installing it on a camera and calibrating it to work with sufficient accuracy would be prohibitively expensive. The finders on professional cameras make this correction—some of them automatically—but such a finder, installed, costs more than many a complete 16mm. camera.

For a subject like the bee gathering honey, a paper by J. W. McFarland of the Kodak Research Laboratory, "Action of Supplementary Lenses," which appeared in the July, 1934, issue of this magazine, suggests a simple and practical method.

This is to make an accessory similar to the Cine-Kodak holder. In simplest form, this would consist of a wooden base drilled at one end to take a quarter-inch machine screw to engage the tripod socket of the camera, and fitted with blocks to assure that the camera is always placed in the same position.

Immediately in front of the camera lens is a wooden upright which holds

the supplementary lens. This lens is a simple spectacle-lens of the desired power. At the far end of the wooden base, about an inch and a half nearer the camera than the focal point, is a simple wire frame which indicates the field covered. The following table indicates the various dimensions, etc., for spectacle lenses of different powers, when used with 16mm. camera and 25mm. lens, or 8mm. camera and 12.5mm. lens:

Distance (ft)	Field Size (in x in)	Displacement (in)	Supp. Lens
inches	inches	inches	
70	27 x 16	6	1.8 Dioptre
100	9 x 9	3	2.5 Dioptre
125	6 x 6 1/2	2	3.0 Dioptre
150	5 1/2 x 4 1/2	2	3.6 Dioptre
175	5 x 4	1 1/2	4.0 Dioptre
200	4 1/2 x 3 1/2	1	4.5 Dioptre

Displacement (e) refers to the distance the wire frame is set back (toward the camera) from the actual focal plane. The camera lens is focused at infinity. The supplementary lens does not alter the stop markings, nor change the exposure needed.

Fred Ellis used a device of this nature very successfully on his notable Contest Film of 1935, "In The Beginning," for close shots of silkworms, frogs, lizards, etc. The wire frame serves as a finder, and obviously does not give rise to much error in parallax. The camera can be used on a tripod or in the hand, and "panned" with perfect freedom to follow the action of the animal or insect being followed.

WILLIAM STULL, A.S.C.

Amateur Scenarios

I have been a reader of the American Cinematographer for a long time and have found it very helpful in my amateur moving picture making. I have learned many new hints and also about various useful gadgets. I am interested in securing a book containing scenarios which can be filmed by the amateur, like those you have published from time to time. Are there any such available?

JOSEPH BITTO
(no address given)

Several years ago the Eastman Kodak Company published a book of this type called "Junior Scenarios." This is understood to be out of print now, but copies may perhaps be available through some dealers or through the Kodak company in Rochester. Some new books of this nature have recently been announced for publica-

tion shortly. Among them is "Making Movies," now being prepared by Sylvan Simon, Universal Pictures production executive.

We regret that you did not give your address when you wrote us. This is really a most important thing to do in sending us questions. Aside from giving evidence of the questioner's good faith, it frequently enables us to answer him more fully. Often a question requires a more detailed answer than is possible to print in the limited space this department allows.

Sometimes, too, your question may not give enough detail to permit our experts to give you an answer specific enough to be helpful. If you give no address we cannot write and ask you for the details that will enable us to give you a really practical answer. For your own protection always include your full name and address in your letters.—[Ed]

Sergeant Teorey is Outstanding Disciple of 8mm

Continued from Page 163

of sources. One of the best is those series of "Miracle Eye" candid camera pictures some newspapers print, showing movies stars telling a story in pictured action.

"One I did recently (with myself as star) was from a series that showed William Frawley telephoning his wife on a sofa for staying late at the office. Maybe the gags aren't always new, but they are fun to do and fun to screen. And they give the victims something definite to do. That's half the secret of making good movies of people."

"Making movies in the Navy? Well, just lately they've insisted officers against carrying cameras on ship-board, but they relax them in special instances like the President's cruise.

Shipmates Cooperate

"Generally speaking, my shipmates have been very generous in cooperating with my filming. That goes for everyone from the Commander right down the line. The officers are glad to help a filming shipmate get good pictures of themselves and of official ceremonies. If your pictures are good they certainly enjoy a chance to see



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them on the screen. As soon as I've had time to get my pictures of the Chester's cruises cut I get plenty of requests to show them to both my commissioned and enlisted shipmates.

"The compactness of 8mm equipment is a big advantage on a warship, where you haven't much space to stow your camera kit. At that, I'm lucky, for as Senior Enlisted Man of our Marine Detail, I have an office with a desk and locker where I can always find room for an 8mm camera.

"Since I started my 8mm, filming I've converted several members of the Chester's crew to movie making. Two other Marines and several sailors have succumbed to the 8mm bug. We help each other out quite a bit. For instance, when we crossed the equator on the way to Buenos Aires, I, as a "shellback" (I'd crossed the line before) was immune to the rough-and-ready attentions of Neptune's court. So I packed two cameras—one of them for a shipmate who wanted a complete record of his progress through Neptune's initiation.

"When we're in a strange port I follow one rule that might help touring civilians. Unless I am up with another moviemaker I always go ashore alone. The average tourist—whether he is a civilian or a marine on liberty—can't particularly interest in pictures nor is he patient or helpful to one who is. Even a still camera enthusiast isn't interested in the same subjects a moviemaker wants to shoot. So I always go alone. That way I have only myself to blame if I don't bring back the scenes I want!"

(A second article, describing more of Sergeant Teorey's numerous projects, will appear in the May issue.)

BRIDGE OPENING IN SOUND

A new 16mm single-reel film dealing with the construction and gala opening of San Francisco's magnificent new bridge is being offered by Bell & Howell Company's film division.

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Cinching Abroad at Home

Continued from Page 167

An evidence of this today we have its influence shown in the new sport clothing, and odd words added to our vocabulary.

Railroads even run so-called "Snow Trains" or excursions to winter resorts where skiing, tobogganing, ice skating and mushing or Eskimo dog sledding can be enjoyed.

There are many localities that for filming purposes rival the ski centers of the French Alps (Chamonix), Swiss (Mount Moritz), Bavarian Tyrol and Scandinavian countries. For instance, there are the New England States, Northern New York (Lake Placid), Michigan, Wisconsin, the western National Parks (Bainier, Yosemite) and (Lake Arrowhead) in the San Bernardino Mountains, California.

The latest bid for outdoor sports is the new winter resort recently opened at Ketchum Valley, Idaho, called appropriately "Sun Valley." In addition to skiing, our fastest growing sport, are tobogganing, Eskimo mushing and ice skating with all their thrills and scenery that compares with any in the world.

Enriching Language

Our cinematist has a wealth of material at his command. Ski-jumping makes excellent filming, sailing over the snow slopes and also suggesting trick scenes, such as slow motion, or reverse action (made by holding the camera up-side-down, while shooting; reversing the scene when returned from processing).

Recently there was introduced the "Blizzard" race, which is a contest wherein persons on skis come down hill, twisting between markers. The one making the best time and remaining upright at the bottom of the hill wins the race.

Our language is enriched with such new terms as "Voelage," "Gelände-sprunge," "Sess Christlanas," "Tel-marks," and "Tempo," all having to do with fancy positions and skiing turns.

Hawaii and the South Sea Islands have their counterpart in the lower California and Pacific Coast regions, with the palm fringed coast, tropical bathing beaches and surfboat riding.

China is easily filmed in the picturesque Chinatowns in San Francisco, Los Angeles, Chicago and New York City. In February the Chinese celebrate their New Year, with parades, fireworks which is an opportune time, too, for the cine filmer.

Japan is represented here by the lovely springtime cherry blossoms at

Washington, the Japanese quarter in Los Angeles, and their Budha Temple New Zealand and our Yellowstone Park are the only places where geysers and hot bubbling mud pools exist Germany—we have the Black Forest, in wooded loveliness, in duplicate in Yosemite National Park. The Mississippi River at Guttenberg, Iowa,

and the palisades along the Hudson River are a true reminder of the Rhine.

Beauties Paralleled

Italy and the Mediterranean Riviera and its villas can be visualized along the coast of Southern California and Florida. For the Bay of Naples we call on the Italian fishermen at San Francisco Water Front.

Latin countries, like Spain, Mexico, and Portugal are to be seen in the typical architecture of San Diego, Santa Barbara and the gay Olvera Street district of Los Angeles. The wild country at Carmel-by-the-Sea resembles the Basque highlands (Biarritz), and the Seventeen-Mile Drive in the ocean at Monterey is another Amalfi, Italy.

Palm Springs, California, is a filmer's paradise with date gardens, painted mesas and nearby Andreas Canyon shifting sands of an African desert. In the distance is the magnificent resemblance to the Swiss Alps in our Mount San Jacinto.

A wee bit of Scotland is to be found at Del Monte, Calif., and in Maine with their rugged coast line.

For title backgrounds it is suggested that foreign postcards, snap shots or illustrations from travel magazines be used.

Time May Be Taken

The purpose of this article is primarily to call attention to the photographic possibilities of our foreign atmosphere, comparable to any abroad. No attempt is made to describe or make a complete survey. No doubt the prospective film traveler will add to this list many interesting scenes and attractive ideas to film, such as waterfalls (Niagara) and in our national parks.

Natural Bridges (Virginia), Caves (Mammoth-Kentucky), (Carlsbad, New Mexico), Natural Woods and Big Trees, etc.

Such a film narrative must necessarily take a long time in its making during various seasons and ideal conditions and when at leisure. In fact, one may consider the scenario always unfinished, to be added to like a continued story, as the film footage accumulates. A liberal use of natural color film is recommended because of its beauty and audience appeal.

■

BRAZILIAN CENSORSHIP IN 1936

According to the records of the Federal Department of Propaganda of Brazil, 2,235 pictures, representing a total of 4,956,357 running feet of film, were submitted for censorship during 1936. Of this total 1,445 pictures were of American make

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Dersch and Duerr Tell of Agfa Experiments

PHOTOGRAPHERS who have wished for still greater speed than modern emulsions can provide will be interested in the new and practical method of dry hypersensitizing with mercury vapor recently published in the *Journal of the Society of Motion Picture Engineers* (Vol. 25, No. 2). The new method, which is the result of experiments carried out by Drs. Dersch and Duerr at the Agfa Anso Research Laboratories in Binghamton, holds appeal to the amateur as well as professional, for the technique is extremely simple and surprisingly effective, giving from 50 to 150 percent increase in emulsion sensitivity.

To effect the hypersensitizing wrapped or unwrapped film is merely placed in a sealed container with a small amount of liquid mercury (0.5 gram) or silver amalgam containing a high percentage of mercury. The film is allowed to stand at room temperature from 36 hours for loose, or unwrapped material, to about a week for wrapped or slightly spoiled film.

The sensitizing action of the mercury vapor is reported to be slow and so even that no streaks or spots occur. Actual contact with the film is prevented by placing the mercury in an open glass or metal retainer or by wrapping the amalgam loosely in porous blotting paper.

Advantages Cited

Among the surprising facts revealed by the experiments is the unusual behavior of the latent image when treated with Mercury Vapor—a discovery that may lead to a better understanding of what happens when the latent image is formed. It was found that film showed a markedly greater increase in sensitivity when hypersensitized after exposure instead of before exposure.

Other interesting features of the method are that it shows no apparent effect on the gradation or the grain size of the photographic material. Further characteristics which make the method superior to usual wet-hypersensitizing treatments include the following features reported by Drs. Dersch and Duerr in their article:

"(1) The film does not have to be put through a bathing process and then dried. (2) The mercury vapors are active also upon tightly wound spools of film, the sensitizing effect being uniformly spread over the whole length (e.g., of a 1000-foot roll of 35mm motion picture film). If sufficient time is available for hypersensitizing, the films need not even be removed from their original wrappers, as the mercury vapors diffuse suffi-

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1053 So. Olive St. Los Angeles, Cal.

ciently through the wrapping material.

"(3) The increase of sensitivity is general throughout the range of wavelength of light to which the film was originally sensitive. (4) The stability of the film is not permanently affected, although the increase in speed is gradually lost over a period of four weeks of aging. By a second treatment with mercury vapor the hypersensitization can be renewed in a film that has recovered from previous hypersensitization."

Hittin' the Trail

Continued from Page 171

the man who had befriended her and in turn to reject him when she believed him insincere—all the play of emotions of a girl passing through her first love and her great one—we wondered what Harrison would say if he could slip back and sit in on this drama.

Here's a story that without hesitation we recommend to grown-ups, for it is a story of grown-ups, of two men and a woman. The men are Edward Arnold and George Bancroft, one the capitalist and the other his captain in the field. The tale is strong meat, but without being offensively so.

There's an abundance of laughs—and quite a number of chokes. And of these is real drama made.

A.S.C. Opens Clubhouse

THE housewarming of the American Society of Cinematographers in its new home Sunday, February 23, was one of the memorable spots in that body's lengthening history. The widespread mansion at 3782 North Orange drive took perfect care of the two hundred men and women who soared through its rooms and got acquainted with the facilities and conveniences of the society's new home.

One of the outstanding highlights of a party that will linger in the memories was the getting together of those who across two decades have worked side by side in the business of making pictures for the multitudes—literally for uncounted millions. Strong friendships are formed in the years—and the camaraderie that prevailed through the evening was the strongest evidence of their existence. Behind many of the toasts that were drunk will may have been these thoughts:

FRIENDSHIP

Here's to Friendship that is old,
Welded stronger yet by years;
Here's to friends to have and hold
When life's leaf is in the rear;
Here's to pals who stood the test
When our luck was badly shot;
Here's to those we love the best . . .
Whether Fortune smile or not!

ART REEVES

Continued from Page 147

Another thermostat controls the temperature of the drying compartment, maintaining it within 3 degrees of any predetermined temperature.

Film Polished in Drying

The drive of the film moving mechanism in the dry box is similar to that in the tank—in, through the lower rollers only, with the upper ones revolving freely on ball bearings. Four large fabric-covered drums, revolving freely in the middle of each of the four loops of film in this compartment, serve to polish the back surface of the film as it dries. Vapor-tight lamps in this cabinet permit inspection of the film as it dries.

The take-up is on a standard 2000-foot reel, conveniently mounted and driven by an equidistant belt drive.

The Reeves developing machine is designed primarily for use in temperate climates, and accordingly certain adjustments necessary for use in extremely tropical climates are not normally included. The manufacturer states, however, that such tropical variations as refrigeration and air-conditioning machinery can be supplied when needed.

Reeves' personal preference is for placing the machine in an air-conditioned room, rather than attaching separate solution-refrigerating systems. In this way, he states, every factor of operation, including temperature and humidity of solutions, temperature and humidity of drying air, can most easily be controlled.

Safety Factors

In general, Reeves has built his machine with an enviable factor of safety throughout. As has been seen, precautions have been taken at every point to guard against mechanical failures. Even so simple a matter as having the film fed from a standard 2000-foot reel is a safeguard, as this complete rewinding of the film and the consequent repair of any breaks or weak spots caused accidentally or otherwise in the camera.

The power plants, heating units, and the like are safely oversized. The film-moving drive, for example, actually requires approximately one-tenth of a horsepower for normal operation, yet a one-quarter horsepower motor is actually supplied. The air-compressor, as has been noted, has sufficient reserve power to take care of two machines if necessary.

A similar safety factor is to be recommended in the unusually comprehensive instructions sent out with each machine. Every smallest detail of installation is fully covered, and even such commonplace parts as wiring, plumbing, and fitting-screws are sup-

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gled. Chemical formulas of proved dependability are supplied for mixing developers, redeveloper solutions. Hypo, and the like, with detailed instructions as to how Hollywood's experts use them.

An interesting application of practical psychology—and one to be recommended to all manufacturers in this essentially photographic industry—is the fact that detailed photographs, rather than blueprints, are used to show how to erect the machine. A photograph leaves nothing to guess-work—and that seems the keynote of Reeves' methods throughout.



DA-LITE ANNOUNCES BARGAINS

As a result of its volume business the Da-Lite Screen Company of Chi-

ago announces reductions from 80 to 35 percent in the prices of its Standard Challenger Screen. The sizes range from 30 by 40 inches to 30 by 82. An added feature of this brand is that it is a tripped screen. The company will send literature upon request.

Among the advanced features listed for the Challenger are the fact it may be set up mainly anywhere, the ability to adjust the height of the fully opened screen to individual requirements, the sharp definition through the maximum of light reflected by the glass-beaded surface, the rigidity of mounting, its compactness and minimum weight, enabling its storage in small space, and its sturdy construction.

MODEL 25 VICTOR ANIMATOPHONE 16mm Sound Projector, slightly used. Price \$325.00. complete. 16mm sound on 16mm reel line. Deal. Price \$55. 1—16mm Film Space and hand. Film re-winder. Price \$12. **Bayport Film Library, 221 Bayview Road, Bayport, New Jersey.**

ALL MOVIES 16mm and 8mm. List Price \$10. Station W. Brooklyn, N. Y.

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